



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 99586

TO: Rebecca Cook
Location: CM1/2D01
Art Unit: 1614
Thursday, July 31, 2003

Case Serial Number: 09/868106

From: Barb O'Bryen
Location: Biotech-Chem Library
CM1-6A05
Phone: 308-4291

barbara.obryen@uspto.gov

Search Notes

"please search method of claim 3"

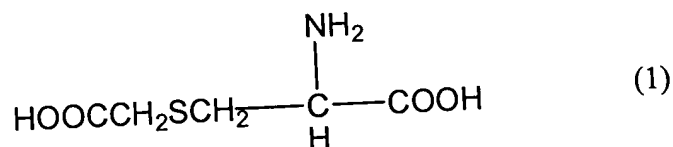
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AMENDMENTS TO THE CLAIMS:

Claims 1 and 2 (Cancelled).

3. (New) A method of preventing a bacterial infectious respiratory disease in a human in need thereof, comprising the step of:

administering to said human an effective amount of a compound having the following formula:



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=> fil reg; d stat que 13

FILE 'REGISTRY' ENTERED AT 12:41:10 ON 31 JUL 2003
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

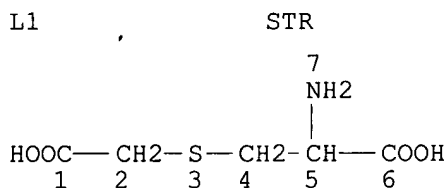
STRUCTURE FILE UPDATES: 29 JUL 2003 HIGHEST RN 557055-78-4
DICTIONARY FILE UPDATES: 29 JUL 2003 HIGHEST RN 557055-78-4

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L3 75 SEA FILE=REGISTRY FAM FUL L1 }

100.0% PROCESSED 451 ITERATIONS
SEARCH TIME: 00.00.01

75 ANSWERS }

=> fil capl; d que nos 117

FILE 'CAPLUS' ENTERED AT 12:41:11 ON 31 JUL 2003
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*family search done
to retrieve salts, stereoisomers,
isotopically labelled substances, &
multicomponent substances*

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FILE COVERS 1907 - 31 Jul 2003 VOL 139 ISS 5
FILE LAST UPDATED: 30 Jul 2003 (20030730/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```

L1          STR
L3          75 SEA FILE=REGISTRY FAM FUL L1
L5          681 SEA FILE=CAPLUS ABB=ON L3
L9          2154 SEA FILE=CAPLUS ABB=ON RESPIRATORY TRACT/CT(L) INFECT?
L10         20590 SEA FILE=CAPLUS ABB=ON TUBERCULOSIS/OBI
L11         1037 SEA FILE=CAPLUS ABB=ON CATARRHALIS/OBI
L12         4852 SEA FILE=CAPLUS ABB=ON (H OR HAEMOPHILUS) (W) INFLUENZAE/OBI
L13         8460 SEA FILE=CAPLUS ABB=ON (S OR STREP?) (W) (PNEUMO? OR PYOGENES)/O
          BI
L14         6227 SEA FILE=CAPLUS ABB=ON (K OR KLEB?) (W) PNEUMO?/OBI
L15         1880 SEA FILE=CAPLUS ABB=ON (GROUP(W)A) (A) STREP?/OBI
L16         312 SEA FILE=CAPLUS ABB=ON INFECTION/CT(L) (RESPIRATORY)
L17         5 SEA FILE=CAPLUS ABB=ON L5 AND (L9 OR L10 OR L11 OR L12 OR L13)
          (OR L14 OR L15 OR L16)

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=> fil uspatf; d que nos 128

FILE 'USPATFULL' ENTERED AT 12:41:11 ON 31 JUL 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 31 Jul 2003 (20030731/PD)
FILE LAST UPDATED: 31 Jul 2003 (20030731/ED)
HIGHEST GRANTED PATENT NUMBER: US6601238
HIGHEST APPLICATION PUBLICATION NUMBER: US2003145366
CA INDEXING IS CURRENT THROUGH 31 Jul 2003 (20030731/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 31 Jul 2003 (20030731/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2003
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2003

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>>> USPAT2 is now available. USPATFULL contains full text of the <<<
>>> original, i.e., the earliest published granted patents or <<<
>>> applications. USPAT2 contains full text of the latest US <<<
>>> publications, starting in 2001, for the inventions covered in <<<
>>> USPATFULL. A USPATFULL record contains not only the original <<<
>>> published document but also a list of any subsequent <<<
>>> publications. The publication number, patent kind code, and <<<
>>> publication date for all the US publications for an invention <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc. <<<

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>>> USPATFULL and USPAT2 can be accessed and searched together <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<
>>> enter this cluster. <<<
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<

```

This file contains CAS Registry Numbers for easy and accurate

substance identification.

```
L1          STR
L3          75 SEA FILE=REGISTRY FAM FUL L1
L18         58 SEA FILE=USPATFULL ABB=ON L3
L19         160 SEA FILE=USPATFULL ABB=ON RESPIRATORY TRACT/CT(L) INFECT?/IT
L20         1148 SEA FILE=USPATFULL ABB=ON TUBERCULOSIS/IT, TI, AB, CLM
L21         202 SEA FILE=USPATFULL ABB=ON CATARRHALIS/IT, TI, AB, CLM
L22         629 SEA FILE=USPATFULL ABB=ON ((H OR HAEMOPHILUS) (W) INFLUENZAE) /IT
          , TI, AB, CLM
L23         1122 SEA FILE=USPATFULL ABB=ON ((S OR STREP?) (W) (PNEUMO? OR
          PYOGENES) ) /IT, TI, AB, CLM
L24         612 SEA FILE=USPATFULL ABB=ON ((K OR KLEB?) (W) PNEUMO?) /IT, TI, AB, CL
          M
L25         224 SEA FILE=USPATFULL ABB=ON ((GROUP(W)A) (A) STREP?) /IT, TI, AB, CLM
L26         23 SEA FILE=USPATFULL ABB=ON INFECTION/CT(L) (RESPIRATORY) /IT
L27         192 SEA FILE=USPATFULL ABB=ON PNEUMOCOCC?/IT, TI, AB, CLM
L28         1 SEA FILE=USPATFULL ABB=ON L18 AND (L19 OR L20 OR L21 OR L22
          OR L23 OR L24 OR L25 OR L26 OR L27)
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=> fil medl cancer; d que nos 140

FILE 'MEDLINE' ENTERED AT 12:41:12 ON 31 JUL 2003

FILE 'CANCERLIT' ENTERED AT 12:41:12 ON 31 JUL 2003

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L1          STR
L3          75 SEA FILE=REGISTRY FAM FUL L1
L29         268 SEA L3
L30         183053 SEA RESPIRATORY TRACT INFECTIONS+NT/CT
L31         38 SEA L29 AND L30
L39         5583 SEA COMMON COLD/CT OR RHINITIS, ALLERGIC, PERENNIAL/CT
L40         36 SEA L31 NOT L39
```

=> fil embase; d que nos 137

FILE 'EMBASE' ENTERED AT 12:41:12 ON 31 JUL 2003

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FILE COVERS 1974 TO 24 Jul 2003 (20030724/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

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```
L1          STR
L3          75 SEA FILE=REGISTRY FAM FUL L1
L32         707 SEA FILE=EMBASE ABB=ON L3
L33         69802 SEA FILE=EMBASE ABB=ON RESPIRATORY TRACT INFECTION+NT/CT
L34         1562 SEA FILE=EMBASE ABB=ON COMMON COLD/CT
L35         9230 SEA FILE=EMBASE ABB=ON VIRUS PNEUMONIA/CT OR INFLUENZA/CT
L36         247975 SEA FILE=EMBASE ABB=ON VIRUS INFECTION+NT/CT
L37         27 SEA FILE=EMBASE ABB=ON (L32 AND L33) NOT ((L34 OR L35 OR
          L36))
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=> dup rem 117,128,140,137

FILE 'CAPLUS' ENTERED AT 12:41:13 ON 31 JUL 2003
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FILE 'MEDLINE' ENTERED AT 12:41:13 ON 31 JUL 2003

FILE 'EMBASE' ENTERED AT 12:41:13 ON 31 JUL 2003
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PROCESSING COMPLETED FOR L17

PROCESSING COMPLETED FOR L28

PROCESSING COMPLETED FOR L40

PROCESSING COMPLETED FOR L37

L41 67 DUP REM L17 L28 L40 L37 (2 DUPLICATES REMOVED)

ANSWERS '1-5' FROM FILE CAPLUS

ANSWER '6' FROM FILE USPATFULL

ANSWERS '7-41' FROM FILE MEDLINE

ANSWERS '42-67' FROM FILE EMBASE

=> d ibib abs hitstr 1-6; d iall 7-67

L41 ANSWER 1 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 1999:233082 CAPLUS

DOCUMENT NUMBER: 131:53818

TITLE: The effects of S-carboxymethylcysteine and N-acetylcysteine on the adherence of *Moraxella catarrhalis* to human pharyngeal epithelial cells

AUTHOR(S): Zheng, Can Hong; Ahmed, Kamruddin; Rikitomi, Naoto; Martinez, Glenda; Nagatake, Tsuyoshi

CORPORATE SOURCE: Department of Internal Medicine, Institute of Tropical Medicine, Nagasaki University, Nagasaki, Nagasaki, 852-8523, Japan

SOURCE: Microbiology and Immunology (1999), 43(2), 107-113

CODEN: MIIMDV; ISSN: 0385-5600

PUBLISHER: Center for Academic Publications Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We investigated the effects of two mucoregulating drugs, S-carboxymethylcysteine (S-CMC) and N-acetylcysteine (NAC), on the attachment of *Moraxella catarrhalis* (M. catarrhalis) to pharyngeal epithelial cells. The attachment of M. catarrhalis decreased (33-57%) significantly ($P < 0.01$) in a dose-dependent manner in cells treated with mucoregulating drugs as compared to the control. There was a significant ($P < 0.01$) decrease (35-45%) in the attachment of M. catarrhalis to pharyngeal cells after oral administration of S-CMC. By electron microscopic observation, it was found that there was a fine, granular, electron-dense, ruthenium red-pos. layer on the surface of pharyngeal epithelial cells; this layer was absent on cell surfaces treated with mucoregulating drugs. Possibly, this layer contained the portion of M. catarrhalis receptor which is responsible for the attachment of this bacteria to pharyngeal epithelial cells. From the above results, it may be concluded that one of the mechanisms of mucoregulating drugs to decrease the episode of respiratory infections in patients with chronic respiratory diseases is by inhibiting the attachment of bacteria to the upper respiratory tract.

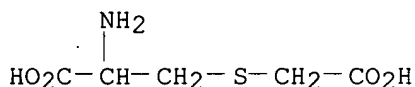
IT 25390-17-4, S-Carboxymethylcysteine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(effects of S-carboxymethylcysteine and N-acetylcysteine on the adherence of *Moraxella catarrhalis* to human pharyngeal epithelial cells)

RN 25390-17-4 CAPLUS

CN Cysteine, S-(carboxymethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 2 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:218661 CAPLUS

DOCUMENT NUMBER: 135:266958

TITLE: Modulating effects of mucoregulating drugs on the attachment of *Haemophilus influenzae*

AUTHOR(S): Ndour, Cheikh Tidiane; Ahmed, Kamruddin; Nakagawa, Tomomi; Nakano, Yamaji; Ichinose, Akitoyo; Tarhan, Gulnur; Aikawa, Masamichi; Nagatake, Tsuyoshi

CORPORATE SOURCE: Department of Internal Medicine, Nagasaki University, Nagasaki, 852-8102, Japan

SOURCE: Microbial Pathogenesis (2001), 30(3), 121-127

CODEN: MIPAEV; ISSN: 0882-4010

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Non-typable *Haemophilus influenzae* (NTHI) is one of the three major pathogens implicated in human respiratory infections. The ability to attach with pharyngeal epithelial cells is an important factor for infection and virulence. In the present study we describe the effects of two mucoregulating drugs, S-carboxymethylcysteine (S-CMC) and ambroxol, on the attachment of NTHI to pharyngeal epithelial cells. There was a significant ($P < 0.0001$, < 0.001 and < 0.01) decrease of attachment (8.8 ± 2.4 , 9.2 ± 2.5 and 15.4 ± 5.7 bacteria/cell) compared with the control (17.5 ± 2.9 , 15.5 ± 3.1 and 18.8 ± 6.8 bacteria/cell) after cells were treated with S-CMC at a dose of 100, 10 and 1 $\mu\text{g/mL}$. After attachment assay, cells treated with S-CMC (100 $\mu\text{g/mL}$) showed a significant decrease ($P < 0.01$) of attached bacteria (3.1 ± 0.8 bacteria/cell) compared with the control (5.9 ± 1.8 bacteria/cell). Treatment of cells with ambroxol did not influence bacterial attachment. By scanning electron microscopic observation it was found that NTHI attaches to the surface elevations (microplicae) of human pharyngeal epithelial cells. Atomic force microscopic observation revealed that the surface potential of microplicae decreased significantly in cells treated with S-CMC compared with the untreated control cells. As bacteria with neg. surface charge attach to the pos. charged domain, i.e. microplicae of human pharyngeal epithelial cells, this study suggests that the decrease of attachment of NTHI with epithelial cells after treatment with S-CMC was possibly due to the decrease of surface charge. This study suggests that S-CMC decreases the episodes of respiratory infections in patients with respiratory diseases both by inhibiting the attachment of bacteria to the upper respiratory tract, and by detaching the adherent one. (c) 2001 Academic Press.

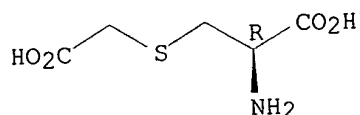
IT 638-23-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(modulating effects of mucoregulating drugs on attachment of
Haemophilus influenzae to pharyngeal epithelial
cells)

RN 638-23-3 CAPLUS
CN L-Cysteine, S-(carboxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 3 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:441621 CAPLUS
DOCUMENT NUMBER: 133:68963
TITLE: Preventive for respiratory infectious diseases
INVENTOR(S): Nagatake, Tsuyoshi
PATENT ASSIGNEE(S): Kyorin Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 12 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

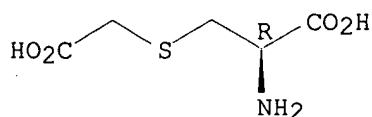
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000037070	A1	20000629	WO 1998-JP5810	19981222
W:	AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IS, JP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2359603	AA	20000629	CA 1998-2359603	19981222
AU 9916857	A1	20000712	AU 1999-16857	19981222
EP 1159959	A1	20011205	EP 1998-961478	19981222
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			

PRIORITY APPLN. INFO.: WO 1998-JP5810 A 19981222
AB Disclosed is a preventive for respiratory infectious diseases, contg. as the active ingredient carbocysteine. It is expected that this preventive serves as a drug capable of preventing infectious diseases in the pre-infective step of respiratory infection, i.e., the step of the adhesion of bacteria to the respiratory tract and thus contributes to the redn. of acute exacerbation frequency in patients with chronic diseases and to the prevention of bacterial infection in those with immune depression, thereby inhibiting the increase in insensible bacteria caused by the frequent use of antimicrobials.

IT 638-23-3, Carbocysteine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carbocysteine for prevention of respiratory infectious diseases)

RN 638-23-3 CAPLUS
CN L-Cysteine, S-(carboxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

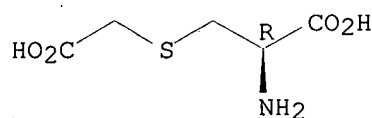


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 4 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:997702 CAPLUS
DOCUMENT NUMBER: 124:37727
TITLE: Compound benproperine pharmaceutical compositions for respiratory infections
INVENTOR(S): Ye, Rongke
PATENT ASSIGNEE(S): Baiyunshan Pharmaceuticals Stock-Sharing Co., Ltd., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 4 pp. CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1104500	A	19950705	CN 1993-106648	19930610
PRIORITY APPLN. INFO.:			CN 1993-106648	19930610
AB	Antiinflammatory, antitussive, and expectorant compns. for patients with respiratory infections comprise benproperine, carboxymethylcysteine and houttuynine at a ratio of 2:15:5. Capsules were formulated contg. benproperine 20, carboxymethyl cysteine 150, and houttuynine 50g.			
IT	638-23-3 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compd. benproperine pharmaceutical compns. for respiratory infections)			
RN	638-23-3 CAPLUS			
CN	L-Cysteine, S-(carboxymethyl)- (9CI) (CA INDEX NAME)			

Absolute stereochemistry.



L41 ANSWER 5 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1986:618683 CAPLUS
DOCUMENT NUMBER: 105:218683
TITLE: Preclinical and clinical investigation on combination effects of expectorants in chemotherapy of infectious respiratory diseases
AUTHOR(S): Imaoka, Makoto
CORPORATE SOURCE: Dep. Int. Med., Shimane Prefect. Cent. Hosp., Izumo, 693, Japan
SOURCE: Chemotherapy (Tokyo) (1986), 34(3), 262-70
CODEN: NKRZAZ; ISSN: 0369-4682
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Mice were orally treated with rifampicin (I) [13292-46-1], ampicillin

[69-53-4], orcephalexin [15686-71-2] alone or in combination with expectorants ambroxol (II) [18683-91-5], carbocysteine [638-23-3], or serratiopeptidase [37312-62-2]. After combination treatment with expectorants peak blood levels of the antibiotics increased in serum, lung, liver, and kidney. After combination of I plus II, the antibiotic concns. increased in serum and lung; the peak level increased by 46-137%. The results are discussed in terms of chemotherapy of infectious respiratory disease.

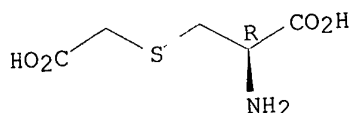
IT 638-23-3

RL: BIOL (Biological study)
(respiratory tract infection therapy with antibiotics and)

RN 638-23-3 CAPLUS

CN L-Cysteine, S-(carboxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L41 ANSWER 6 OF 67 USPATFULL on STN

ACCESSION NUMBER: 2003:119623 USPATFULL
TITLE: Buccal, polar and non-polar spray or capsule containing
drugs for treating an infectious disease or cancer
INVENTOR(S): Dugger, Harry A., III, Flemington, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003082107	A1	20030501
APPLICATION INFO.:	US 2002-230080	A1	20020829 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-537118, filed on 29 Mar 2000, PENDING Continuation-in-part of Ser. No. WO 1997-US17899, filed on 1 Oct 1997, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	PENNIE & EDMONDS LLP, 1667 K STREET NW, SUITE 1000, WASHINGTON, DC, 20006		
NUMBER OF CLAIMS:	99		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	1 Drawing Page(s)		
LINE COUNT:	1178		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Buccal aerosol sprays or capsules using polar and non-polar solvent have now been developed which provide biologically active compounds for rapid absorption through the oral mucosa, resulting in fast onset of effect. The buccal polar compositions of the invention comprise formulation I: aqueous polar solvent, active compound, and optional flavoring agent; formulation II: aqueous polar solvent, active compound, optionally flavoring agent, and propellant; formulation III: non-polar solvent, active compound, and optional flavoring agent; and formulation IV: non-polar solvent, active compound, optional flavoring agent, and propellant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

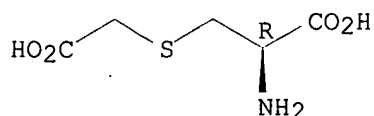
IT 638-23-3

(buccal sprays or capsules contg. drugs for treating an infectious disease or cancer)

RN 638-23-3 USPATFULL

CN L-Cysteine, S-(carboxymethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L41 ANSWER 7 OF 67 MEDLINE on STN
ACCESSION NUMBER: 1999265802 MEDLINE
DOCUMENT NUMBER: 99265802 PubMed ID: 10334633
TITLE: Erdosteine enhances mucociliary clearance in rats with and without airway inflammation.
AUTHOR: Hosoe H; Kaise T; Ohmori K
CORPORATE SOURCE: Drug Development Research Laboratories, Pharmaceutical Research Institute, Kyowa Hakko Kogyo Co., Ltd., Shizuoka, Japan.
SOURCE: JOURNAL OF PHARMACOLOGICAL AND TOXICOLOGICAL METHODS, (1998 Oct) 40 (3) 165-71.
Journal code: 9206091. ISSN: 1056-8719.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199907
ENTRY DATE: Entered STN: 19990727
Last Updated on STN: 19990727
Entered Medline: 19990713

ABSTRACT:

Erdosteine is a new homocysteine-derived expectorant and has been reported to have many mucolytic effects. In this report, we studied the activities of erdosteine on mucociliary clearance in normal and airway-inflammation-induced rats. In normal rats, erdosteine at doses of 100-600 mg/kg significantly promoted mucociliary clearance. However, erdosteine did not change the concentrations of mucopolysaccharides in bronchoalveolar lavage fluid (BALF). In the LPS-instilled rats, the mucociliary clearance was inhibited and the number of inflammatory cells, albumin concentration, and mucopolysaccharides concentration in BALF were increased. Erdosteine at doses of 100-600 mg/kg significantly attenuated the inhibition of mucociliary clearance and the increase of inflammatory cells, however, it did not prevent the increase of albumin and mucopolysaccharides. Other mucolytic drugs which are ambroxol and S-carboxymethylcysteine, had no effect. These results indicate that erdosteine promotes the mucociliary clearance in normal and airway-inflammation-induced rats.

CONTROLLED TERM: Check Tags: Animal; Comparative Study; Male
Albumins: AN, analysis
Ambroxol: PD, pharmacology
*Bronchi: DE, drug effects
Bronchi: PH, physiology
Bronchitis: CI, chemically induced
*Bronchitis: ME, metabolism
Bronchoalveolar Lavage Fluid: CH, chemistry
Carbocysteine: PD, pharmacology
Carbon: PK, pharmacokinetics
*Expectorants: PD, pharmacology
Glycosaminoglycans: AN, analysis
Lipopolysaccharides: PD, pharmacology
*Mucociliary Clearance: DE, drug effects
Particle Size

Rats
Rats, Wistar
*Thioglycolates: PD, pharmacology
*Thiophenes: PD, pharmacology
Time Factors
CAS REGISTRY NO.: 18683-91-5 (Ambroxol); 2387-59-9 (Carbocysteine);
7440-44-0 (Carbon); 84611-23-4 (erdosteine)
CHEMICAL NAME: 0 (Albumins); 0 (Expectorants); 0 (Glycosaminoglycans); 0
(Lipopolysaccharides); 0 (Thioglycolates); 0 (Thiophenes)
*Registry records for
medline & Embase
hits printed
at end*

L41 ANSWER 8 OF 67 MEDLINE on STN
ACCESSION NUMBER: 1998010724 MEDLINE
DOCUMENT NUMBER: 98010724 PubMed ID: 9349882
TITLE: Improvement of mucosal pathology of the sinuses after
exposure to sulfur dioxide by nebulization of
S-carboxymethylcysteine.
AUTHOR: Sugiura Y; Ohashi Y; Nakai Y
CORPORATE SOURCE: Department of Otolaryngology, Osaka City University Medical
School, Japan.
SOURCE: ACTA OTO-LARYNGOLOGICA. SUPPLEMENT, (1997) 531 10-6.
Journal code: 0370355. ISSN: 0365-5237.
PUB. COUNTRY: Norway
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199712
ENTRY DATE: Entered STN: 19980109
Last Updated on STN: 20000303
Entered Medline: 19971209

ABSTRACT:
Since s-carboxymethylcysteine (S-CMC) can directly enhance the ciliary activity in the maxillary sinus mucosa of patients with chronic sinusitis in the absence of significant organic changes of ciliated cells, the nebulization therapy using this medicine might be more effective in the treatment of chronic sinusitis than oral administration of the medicine. The safety of using 0.5-10% of S-SMC as a medicine for nebulization has been experimentally established. The present study was designed to experimentally examine the effectiveness of nebulization using 0.5-10% of S-CMC solution in the treatment of experimental chronic sinusitis in rabbits recurrently exposed to 20 ppm of sulfur dioxide. Thirty-three healthy rabbits were used; 3 of them were used as controls. The remaining 30 were exposed to 20 ppm of sulfur dioxide for 4 h a day for 4 successive weeks. Twelve animals were not treated with any medication during the post-exposure period, and sacrificed at 24 h or 15 days after completion of the final exposure to sulfur dioxide. The remaining 18 animals were treated with nebulization using 10%, 5% or 0.5% of S-CMC solution for 20 min a day for 14 successive days after the final exposure to sulfur dioxide, and they were sacrificed at 24 h after the final nebulization using S-CMC. At the time of sacrifice, the ciliary activity and the morphology of the sinus mucosa were observed to assess the effectiveness of S-CMC nebulization. In the animals sacrificed 24 h after the final exposure, the mucosa of the sinus demonstrated marked epithelial cell injuries, and the ciliary activity was extremely reduced. Complete recovery of the epithelium and the ciliary activity was not recognized in the animals sacrificed 15 days after completion of the exposure. By contrast, epithelial recovery was more accelerated in the animals treated with S-CMC nebulization during the 14 days after the exposure. In the animals treated with 0.5% of S-CMC, the ciliary activity was inferior to that of the control animals, and the epithelial repair was not complete. In the animals treated with 10% of S-CMC, however, ciliary activity and epithelial morphology were completely recovered. In conclusion, our study suggests that clinical application of 10% of S-CMC nebulization may provide otolaryngologists with a new tool in the treatment of sinus diseases such as chronic sinusitis.
CONTROLLED TERM: Check Tags: Animal

*Carbocysteine: TU, therapeutic use
Chronic Disease
Cilia: UL, ultrastructure
Epithelium: UL, ultrastructure
Mucociliary Clearance: DE, drug effects
Nasal Mucosa: PA, pathology
Nasal Mucosa: UL, ultrastructure
Nebulizers and Vaporizers
Rabbits
 Sinusitis: CI, chemically induced
*Sinusitis: DT, drug therapy
 Sinusitis: PA, pathology
 Sinusitis: PP, physiopathology
Sulfur Dioxide

CAS REGISTRY NO.: 2387-59-9 (Carbocysteine); 7446-09-5 (Sulfur Dioxide)

L41 ANSWER 9 OF 67 MEDLINE on STN
ACCESSION NUMBER: 1998010723 MEDLINE
DOCUMENT NUMBER: 98010723 PubMed ID: 9349881
TITLE: Nebulization of S-carboxymethylcysteine does not adversely affect the mucociliary system in the paranasal sinus and trachea of the healthy rabbit.
AUTHOR: Sugiura Y; Ohashi Y; Nakai Y
CORPORATE SOURCE: Department of Otolaryngology, Osaka City University Medical School, Japan.
SOURCE: ACTA OTO-LARYNGOLOGICA. SUPPLEMENT, (1997) 531 5-9.
Journal code: 0370355. ISSN: 0365-5237.
PUB. COUNTRY: Norway
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199712
ENTRY DATE: Entered STN: 19980109
Last Updated on STN: 20000303
Entered Medline: 19971209

ABSTRACT:

Chronic sinusitis is a persistent inflammatory impairment of the paranasal sinus. Disturbance of the mucociliary function in the paranasal sinus is the most common finding in chronic sinusitis. S-carboxymethylcysteine (S-CMC) has been shown to directly enhance the ciliary activity of the chronic sinusitis mucosa. Direct contact of the disturbed cilia with S-CMC may recover the reduced beating activity of cilia in chronic sinusitis and the mucosal pathology of the disease can thus be improved. Before S-CMC as medicine for nebulization in the treatment of chronic sinusitis can be clinically applied, however, it should be experimentally established whether nebulization of S-CMC has any adverse effects on the mucociliary system of the respiratory mucosa. The present study was designed to experimentally examine the safety of nebulization of S-CMC especially with regard to the respiratory mucosa. Rabbits were treated with nebulization of three different concentrations of S-CMC solution for 20 min a day for 14 successive days, and their mucosal pathology of the sinus and trachea was examined and compared with that of healthy animals. Nebulization of concentrations of 0.5-10% of S-CMC solution did not affect the ciliary activity in the sinus and tracheal mucosa, nor did this treatment induce pathological changes such as epithelial injury and inflammatory cell accumulation. It is therefore concluded that concentrations of 0.5-10% S-CMC solution are quite safe for the use of nebulization in the treatment of chronic sinusitis.

CONTROLLED TERM: Check Tags: Animal
*Carbocysteine: AD, administration & dosage
Carbocysteine: TU, therapeutic use
Chronic Disease
*Mucociliary Clearance: DE, drug effects

*Nasal Mucosa: DE, drug effects
Nasal Mucosa: PH, physiology
Nasal Mucosa: UL, ultrastructure
Nebulizers and Vaporizers
*Paranasal Sinuses: DE, drug effects
Paranasal Sinuses: PH, physiology
Paranasal Sinuses: UL, ultrastructure
Rabbits
Sinusitis: DT, drug therapy
Sinusitis: PP, physiopathology
*Trachea: DE, drug effects
Trachea: PH, physiology
Trachea: UL, ultrastructure

CAS REGISTRY NO.: 2387-59-9 (Carbocysteine)

L41 ANSWER 10 OF 67 MEDLINE on STN
ACCESSION NUMBER: 96324013 MEDLINE
DOCUMENT NUMBER: 96324013 PubMed ID: 8739489
TITLE: Prevention of acute exacerbations of chronic obstructive
bronchitis with carbocysteine lysine salt monohydrate: a
multicenter, double-blind, placebo-controlled trial.
AUTHOR: Allegra L; Cordaro C I; Grassi C
CORPORATE SOURCE: Istituto di Tisiologia e Malattie dell'Apparato
Respiratorio, Universita degli Studi, Policlinico San
Matteo, Pavia, Italia.
SOURCE: RESPIRATION, (1996) 63 (3) 174-80.
Journal code: 0137356. ISSN: 0025-7931.
PUB. COUNTRY: Switzerland
DOCUMENT TYPE: (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(MULTICENTER STUDY)
(RANDOMIZED CONTROLLED TRIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199612
ENTRY DATE: Entered STN: 19970128
Last Updated on STN: 19970128
Entered Medline: 19961209

ABSTRACT:
The efficacy and safety of carbocysteine lysine salt monohydrate (SCMC-Lys) in the prevention of acute exacerbations associated with chronic obstructive bronchitis were evaluated in a multicenter double-blind, placebo-controlled, parallel group trial in 662 outpatients. After a 1-month run-in period, patients were randomized to three groups and assigned to receive one of the following oral treatments: continuous SCMC-Lys 2.7 g once daily, intermittent SCMC-Lys at the same dosage (1-week courses alternating with 1-week intervals on placebo) or placebo. Each treatment lasted for 6 months and spanned the cooler months of the year. Evaluation was based on a daily recording of relevant clinical symptoms and signs and subsequent evaluation of the collected data by three blinded independent physicians. A total of 146 patients (23%) failed to complete the 6-month treatment (mostly due to difficulties in complying with protocol requirements), without clear-cut differences in the dropout rate in the three groups. An intention-to-treat analysis revealed that the incidence of patients without exacerbations in the group assigned to continuous SCMC-Lys treatment was significantly higher than in the placebo-treated group ($p < 0.001$). The total number of patients with at least one exacerbation was 66 (29.6%) in the group treated with continuous SCMC-Lys compared with 100 (45.9%) with placebo. In the former group the time between initiation of treatment and first exacerbation was significantly prolonged. The average number of days with acute respiratory illness was significantly decreased in the group receiving continuous SCMC-Lys compared with the group receiving placebo, and this was associated with a significant reduction in the antibiotic consumption during the trial period. In patients assigned to

intermittent treatment, results of the assessed endpoints did not differ significantly from those observed in the placebo group. No serious adverse effects were reported. It is concluded that continuous administration of SCMC-Lys throughout the winter season is effective in preventing acute exacerbations in patients with chronic obstructive bronchitis and it is well tolerated.

CONTROLLED TERM: Check Tags: Female; Human; Male
Adult
Aged
Airway Obstruction: PP, physiopathology
*Airway Obstruction: PC, prevention & control
Airway Obstruction: TH, therapy
Bronchitis: PP, physiopathology
*Bronchitis: PC, prevention & control
Bronchitis: TH, therapy
Carbocysteine: AE, adverse effects
*Carbocysteine: AA, analogs & derivatives
Carbocysteine: TU, therapeutic use
Chronic Disease
Double-Blind Method
Expectorants: AE, adverse effects
Expectorants: TU, therapeutic use
Length of Stay
Middle Age
Recurrence

CAS REGISTRY NO.: 2387-59-9 (Carbocysteine); 82951-55-1
(carbocysteine-lysine)

CHEMICAL NAME: 0 (Expectorants)

L41 ANSWER 11 OF 67 MEDLINE on STN
ACCESSION NUMBER: 96150464 MEDLINE
DOCUMENT NUMBER: 96150464 PubMed ID: 8570882
TITLE: Additive effect of continuous low-dose ofloxacin on
erythromycin therapy for sinobronchial syndrome.
AUTHOR: Ishiura Y; Fujimura M; Saito M; Shibata K; Nomura M;
Nakatsumi Y; Matsuda T
CORPORATE SOURCE: Third Department of Internal Medicine, Kanazawa University
School of Medicine, Japan.
SOURCE: RESPIRATORY MEDICINE, (1995 Nov) 89 (10) 677-84.
Journal code: 8908438. ISSN: 0954-6111.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199603
ENTRY DATE: Entered STN: 19960315
Last Updated on STN: 19960315
Entered Medline: 19960301

ABSTRACT:

It has been established that long-term low-dose erythromycin therapy (EM therapy) is very effective for sinobronchial syndrome, a common condition in Japan characterized by chronic upper and lower airway inflammation. The effect does not result from its bacteriocidal activity and the detailed mechanisms are not known. It takes 3-6 months for EM therapy to improve the symptoms. This study was designed to evaluate the additive effect of continuous low dosage or intermittent usual dosage of ofloxacin (OFLX) on EM therapy in patients with sinobronchial syndrome. Patients with sinobronchial syndrome were randomly allocated to receive one of the following four regimens. Patients in Group A received both low-dose OFLX and EM therapy daily for 6 months. Patients in Group B received EM therapy and intermittent treatment of OFLX for 6 months. Patients in Group C underwent EM therapy for 6 months. Patients in Group D

received neither OFLX nor EM therapy. All patients were given carbocystein for more than 2 months before starting each treatment and during the study period. In patients receiving OFLX and/or EM therapy, these antimicrobial agents were well-tolerated during the treatment period. Amount of sputum in the morning was significantly less in Group C than in Group D after 3-6 months, and decreased significantly in Group A as compared with Group B after 2 weeks, Group C after 2 weeks to 2 months, and Group D after 2 weeks to 6 months. Other symptoms such as number of expectorations, difficulty of expectoration and severity of cough also improved rapidly in Group A. These findings suggest that it is useful to add low-dose OFLX to EM therapy for sinobronchial syndrome, especially within 1-2 months from starting treatment, and it may be cost-effective as this combination therapy can shorten the treatment period of EM therapy.

CONTROLLED TERM: Check Tags: Comparative Study; Female; Human; Male; Support, Non-U.S. Gov't.

Adult

Aged

Aged, 80 and over

*Anti-Infective Agents, Fluoroquinolone: TU, therapeutic use

*Bronchitis: DT, drug therapy

Carbocysteine: TU, therapeutic use

Drug Administration Schedule

Drug Synergism

Drug Therapy, Combination

*Erythromycin: TU, therapeutic use

Japan

Middle Age

*Ofloxacin: AD, administration & dosage

*Sinusitis: DT, drug therapy

Syndrome

CAS REGISTRY NO.: 114-07-8 (Erythromycin); 2387-59-9 (Carbocysteine); 82419-36-1 (Ofloxacin)

CHEMICAL NAME: 0 (Anti-Infective Agents, Fluoroquinolone)

L41 ANSWER 12 OF 67 MEDLINE on STN

ACCESSION NUMBER: 93273289 MEDLINE

DOCUMENT NUMBER: 93273289 PubMed ID: 8500784

TITLE: Carbocisteine improves the mucociliary transport rate in rats with SO₂-induced bronchitis.

AUTHOR: Zahm J M; Levrier J; Duval D; Pierrot D; Puchelle E

CORPORATE SOURCE: INSERM U 314, CHR Maison Blanche, Reims, France.

SOURCE: FUNDAMENTAL AND CLINICAL PHARMACOLOGY, (1993) 7 (3-4) 155-60.

Journal code: 8710411. ISSN: 0767-3981.

PUB. COUNTRY: France

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199306

ENTRY DATE: Entered STN: 19930716

Last Updated on STN: 19930716

Entered Medline: 19930630

ABSTRACT:

In order to study the effect of carbocisteine on the mucociliary function of the respiratory tract, we performed a double-blind study on rats with SO₂-induced (400 ppm) hypersecretion. During the experimental bronchitis, the treated group of rats received carbocisteine through a stomach tube at a dose level of 500 mg/kg for 15 days, whereas the untreated group of rats received distilled water. After killing the rats, and following lung excision, the respiratory mucus was scraped off and collected by using a glass capillary. The mucus degree of purulence was macroscopically estimated and the mucus transport rate was measured by using the frog palate technique. The mean mucus

relative transport rate, measured on the frog palate, was 0.60 +/- 0.17 in the untreated group and was significantly higher ($P < 0.01$) in the treated group (0.73 +/- 0.14). Carbocysteine also significantly altered ($P < 0.01$) the mucus macroscopical aspect, leading to a decrease in the number of rats with purulent mucus. These results suggest that carbocysteine maintains an efficient mucus transport rate, leading to a less infected respiratory tract.

CONTROLLED TERM: Check Tags: Animal; Male
*Bronchitis: PP, physiopathology
*Carbocysteine: PD, pharmacology
Double-Blind Method
Microscopy, Electron
*Mucociliary Clearance: DE, drug effects
Mucous Membrane: UL, ultrastructure
Mucus: ME, metabolism
Rats
Rats, Sprague-Dawley
Respiratory System: UL, ultrastructure
Sulfur Dioxide
CAS REGISTRY NO.: 2387-59-9 (Carbocysteine); 7446-09-5 (Sulfur Dioxide)

L41 ANSWER 13 OF 67 MEDLINE on STN
ACCESSION NUMBER: 94078090 MEDLINE
DOCUMENT NUMBER: 94078090 PubMed ID: 8256077
TITLE: Effect of S-carboxymethylcysteine on ciliary activity in chronic sinusitis.
AUTHOR: Ohashi Y; Nakai Y; Sugiura Y; Ohno Y; Okamoto H; Hayashi M
CORPORATE SOURCE: Department of Otolaryngology, Osaka City University Medical School, Japan.
SOURCE: RHINOLOGY, (1993 Sep) 31 (3) 107-11.
Journal code: 0347242. ISSN: 0300-0729.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199401
ENTRY DATE: Entered STN: 19940203
Last Updated on STN: 19940203
Entered Medline: 19940111

ABSTRACT:

This study was designed to investigate the possible pharmacological effect of S-carboxy-methylcysteine (S-CMC) on the ciliary activity, using an in vitro experimental system after removing mucus. Ciliary activity from healthy rabbit maxillary sinus and from healthy human nasal mucosa demonstrated no significant change in RPMI 1640 containing S-CMC. On the other hand, the effect of S-CMC on the reduced ciliary activity from patients with chronic sinusitis was quite varied among the cases examined. S-CMC demonstrated no stimulatory effect on the beating activity of cilia that have a baseline activity of less than 400 beats/min. However, S-CMC was able to enhance the beating activity of cilia that demonstrated a baseline activity of more than 400 beats/min. S-CMC at 0.5% induced a larger ciliostimulatory effect than 0.05% S-CMC. In conclusion, our study has clearly demonstrated that S-CMC could directly enhance ciliary activity of chronic sinusitis in the absence of significant organic change of ciliated cells.

CONTROLLED TERM: Check Tags: Animal; Human; In Vitro
*Carbocysteine: PD, pharmacology
Chronic Disease
Cilia: DE, drug effects
Cilia: PH, physiology
Maxillary Sinus: DE, drug effects
*Maxillary Sinus: PP, physiopathology
*Maxillary Sinusitis: PP, physiopathology
Nasal Mucosa: PH, physiology

CAS REGISTRY NO.: ~~2387-59-9~~ ^{Rabbits} (Carbocysteine)

L41 ANSWER 14 OF 67 MEDLINE on STN
ACCESSION NUMBER: 93008414 MEDLINE
DOCUMENT NUMBER: 93008414 PubMed ID: 1394568
TITLE: [Carbocysteine in the treatment of recurrent bronchitis in infants].
Karbocystein v liecbe recidivujucich bronchitid u dojciat.
AUTHOR: Banovcin P; Jakusová L; Rosslerova V; Miklerova M; Pullmann R
CORPORATE SOURCE: Detska klinika Jeseniovej lekarskej fakulty Univerzity Komenskeho, Martin.
SOURCE: CESKOSLOVENSKA PEDIATRIE, (1992 Sep) 47 (9) 543-6.
Journal code: 0403576. ISSN: 0069-2328.
PUB. COUNTRY: Czechoslovakia
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Slovak
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199211
ENTRY DATE: Entered STN: 19930122
Last Updated on STN: 19930122
Entered Medline: 19921125

ABSTRACT:
In a group of 51 children aged 6-24 months the therapeutic effectiveness of the mucolytic preparation carbocysteine was tested and compared with the effect of Ipeca syrup. The effect was evaluated by means of a point score comprising changes of the clinical picture of the disease and the use of other laboratory examinations. The results of the examination revealed the more favourable effect of carbocysteine, as compared with a mixture of Ipeca syrup in the treatment of acute relapsing bronchitis in infants.

CONTROLLED TERM: Check Tags: Female; Human; Male
*Bronchitis: DT, drug therapy
*Carbocysteine: TU, therapeutic use
Child, Preschool
English Abstract
Infant

CAS REGISTRY NO.: ~~2387-59-9~~ ^{Recurrence} (Carbocysteine)

L41 ANSWER 15 OF 67 MEDLINE on STN
ACCESSION NUMBER: 93138542 MEDLINE
DOCUMENT NUMBER: 93138542 PubMed ID: 1487227
TITLE: Study on the effect of oral administration of carbocysteine on ventilatory parameters in the SO2 inhalation model of bronchitis in the rat.
AUTHOR: Levrier J; Duval D; Lloyd K G
CORPORATE SOURCE: Synthelabo Recherche, (LERS) Biology Department, Bagneux, France.
SOURCE: FUNDAMENTAL AND CLINICAL PHARMACOLOGY, (1992) 6 (6) 231-6.
Journal code: 8710411. ISSN: 0767-3981.
PUB. COUNTRY: France
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199302
ENTRY DATE: Entered STN: 19930312
Last Updated on STN: 19930312
Entered Medline: 19930224

ABSTRACT:
In order to study the physiological correlates of the beneficial action of carbocysteine (S-carboxy-methyl-cysteine), we have measured the changes occurring in ventilatory parameters in rats made bronchitic by prolonged

exposure (2 weeks) to air containing sulfur dioxide (SO₂). In animals treated with distilled water (1 ml/100 g/day), statistically significant ($P < 0.05$) changes in respiratory frequency (-20%) and tidal volume (+31%) were found. As a result of these opposing changes, the ventilation/min was stable. Moreover, the compliance was decreased (33%, $P < 0.05$) and the resistance was greatly enhanced (+ 99%, $P < 0.05$). The concomitant administration of carbocysteine (500 mg/kg po/day) with SO₂ inhalation significantly ($P < 0.05$) prevented the development of resistance without effecting significant changes in the other parameters except for a slight improvement in ventilation/min. In conclusion, this improved respiratory resistance in the bronchitic carbocysteine-treated animals tallies with a decrease in mucus retention associated with the return to normal of rheological characteristics of the secreted mucus.

CONTROLLED TERM: Check Tags: Animal; Male
Administration, Inhalation
Administration, Oral
Bronchitis: CI, chemically induced
*Bronchitis: DT, drug therapy
Bronchitis: PP, physiopathology
*Carbocysteine: TU, therapeutic use
Disease Models, Animal
Lung: DE, drug effects
Random Allocation
Rats
Rats, Sprague-Dawley
*Respiration: DE, drug effects
Respiration: PH, physiology
Respiratory Function Tests
Sulfur Dioxide
CAS REGISTRY NO.: 2387-59-9 (Carbocysteine); 7446-09-5 (Sulfur Dioxide)

L41 ANSWER 16 OF 67 MEDLINE on STN
ACCESSION NUMBER: 92210058 MEDLINE
DOCUMENT NUMBER: 92210058 PubMed ID: 1555809
TITLE: Effects of S-carboxymethyl-L-cysteine on pulmonary sialyl transferase activity in vitro, in healthy and in sulphur-dioxide-induced bronchitic rats.
AUTHOR: Berry C N; Lloyd K G; Louisot P
CORPORATE SOURCE: Synthelabo Recherche (LERS), Bagneux, France.
SOURCE: FUNDAMENTAL AND CLINICAL PHARMACOLOGY, (1992) 6 (1) 29-35.
Journal code: 8710411. ISSN: 0767-3981.
PUB. COUNTRY: France
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199205
ENTRY DATE: Entered STN: 19920515
Last Updated on STN: 19980206
Entered Medline: 19920501

ABSTRACT:

S-carboxymethyl-L-cysteine (carbocysteine) improves the visco-elastic properties of bronchial mucus in vivo, possibly as a result of an increase in the relative proportions of sialomucins in bronchial mucus. Carbocysteine was therefore studied in vitro and ex vivo in both normal and bronchitic rats on pulmonary sialyl transferase, responsible for the addition of sialic acid to mucus glycoproteins. Bronchitis was induced in male Sprague-Dawley rats by repeated exposure to sulphur dioxide for two weeks. During this time they received either 500 mg kg⁻¹ day⁻¹ carbocysteine or its vehicle by the oral route. Rats not being exposed to SO₂ received the same treatment. The animals were then killed, and subcellular fractions prepared by differential centrifugation of lung homogenates. Sialyl transferase was assayed using CMP-14C sialic acid as substrate and desialysed fetuin as exogenous acceptor. Enzyme activity was located in both the (Golgi-containing) 10,000 g and 100,000

g pellets with minor activity in the cytosolic supernatants. When tested in vitro between 10(-6) and 10(-3) M, carbocysteine had no effect on sialyl transferase activity in microsomes taken from healthy or bronchitis rats. Repeated administration of carbocysteine was without effect on the sialyl transferase activity in 10,000 g pellets taken from healthy rats. However, in bronchitic rats there was a small but statistically significant (P less than 0.05) increase in enzymic activity in the treated group compared to the animals receiving the vehicle. There was no difference in the activity of the microsomal enzyme compared to vehicle-treated controls in either healthy or bronchitic rats. We conclude that it is possible that an increase in sialyl transferase activity in a Golgi-containing fraction of bronchitic lungs could explain the relative increase in sialomucins in bronchitic subjects.

CONTROLLED TERM: Check Tags: Animal; Male
 Bronchitis: CI, chemically induced
 ***Bronchitis: EN, enzymology**
 Carbocysteine: AD, administration & dosage
 *Carbocysteine: PD, pharmacology
 *Lung: EN, enzymology
 Rats
 Rats, Inbred Strains
 *Sialyltransferases: AN, analysis
 Subcellular Fractions: EN, enzymology
 Sulfur Dioxide
CAS REGISTRY NO.: ~~2387-59-9~~ (Carbocysteine); 7446-09-5 (Sulfur Dioxide)
CHEMICAL NAME: EC 2.4.99.- (Sialyltransferases)

L41 ANSWER 17 OF 67 MEDLINE on STN
ACCESSION NUMBER: 91288942 MEDLINE
DOCUMENT NUMBER: 91288942 PubMed ID: 2099568
TITLE: Long-lasting effects on rheology and clearance of bronchial mucus after short-term administration of high doses of carbocysteine-lysine to patients with chronic bronchitis.
AUTHOR: Braga P C; Allegra L; Rampoldi C; Ornaghi A; Beghi G
CORPORATE SOURCE: Center for Respiratory Pharmacology, School of Medicine, University of Milan, Italy.
SOURCE: RESPIRATION, (1990) 57 (6) 353-8.
Journal code: 0137356. ISSN: 0025-7931.
PUB. COUNTRY: Switzerland
DOCUMENT TYPE: (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199108
ENTRY DATE: Entered STN: 19910825
Last Updated on STN: 19960129
Entered Medline: 19910805

ABSTRACT:
The rheological behavior and clearance of bronchial mucus samples collected by protected expectoration from 24 out-patients with simple chronic bronchitis were investigated before, at the end of a short period of treatment (4 days) with a single oral dose of 2.7 g (sachet) of carbocysteine-lysine (evening meal), and on the 4th and 8th days after the end of treatment versus placebo. In the group treated with carbocysteine-lysine, there were significant reductions in viscosity (-67, -48, -62%) and increases in mucociliary transport (+41, +31, +34%) at the three times mentioned. The most striking finding was that the improvements were still present 8 days after cessation of treatment. The elasticity parameter was not affected in any statistically significant way (-10, -24, +65%). These findings suggest the presence of some type of 'post-mucoactive' effect.
CONTROLLED TERM: Check Tags: Female; Human; Male
Adult

Aged
*Bronchitis: ME, metabolism
*Carbocysteine: PK, pharmacokinetics
Chronic Disease
Middle Age
Mucociliary Clearance
*Mucus: ME, metabolism
Random Allocation
Rheology
Viscosity

CAS REGISTRY NO.: 2387-59-9 (Carbocysteine)

L41 ANSWER 18 OF 67 MEDLINE on STN
ACCESSION NUMBER: 90120314 MEDLINE
DOCUMENT NUMBER: 90120314 PubMed ID: 2404442
TITLE: Effects of orally administered drugs on dynamic viscoelasticity of human nasal mucus.
AUTHOR: Majima Y; Hirata K; Takeuchi K; Hattori M; Sakakura Y
CORPORATE SOURCE: Department of Otorhinolaryngology, Mie University School of Medicine, Tsu, Japan.
SOURCE: AMERICAN REVIEW OF RESPIRATORY DISEASE, (1990 Jan) 141 (1) 79-83.
Journal code: 0370523. ISSN: 0003-0805.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199002
ENTRY DATE: Entered STN: 19900328
Last Updated on STN: 19970203
Entered Medline: 19900222

ABSTRACT:

The effects of orally administered drugs on rheologic properties of nasal mucus were investigated in adult chronic sinusitis patients. The elastic modulus G' and the dynamic viscosity η' of nasal mucus were determined by an oscillating sphere magnetic rheometer. Both G' and η' values of the mucus before drug administration were much higher than optimal viscoelasticity for mucociliary transport. Norfloxacin, an antibacterial agent, reduced the G' but not the η' of nasal mucus. Serratiopeptidase, a proteolytic enzyme, reduced η' but did not reduce G' . S-carboxymethylcysteine, a blocked thiol derivative of cysteine, did not change either G' or η' . L-cysteine ethyl ester hydrochloride, a sulfhydryl type of agent, reduced both G' and η' . The results indicate that some of the orally administered mucokinetic agents can improve the abnormal rheologic properties of nasal mucus in chronic sinusitis.

CONTROLLED TERM: Check Tags: Female; Human; Male; Support, Non-U.S. Gov't
Administration, Oral
Adolescent
Adult
Aged
Aged, 80 and over
Carbocysteine: AD, administration & dosage
Carbocysteine: PD, pharmacology
Chronic Disease
Elasticity: DE, drug effects
Middle Age
*Mucus: DE, drug effects
Mucus: PH, physiology
*Nasal Mucosa: SE, secretion
Norfloxacin: AD, administration & dosage
Norfloxacin: PD, pharmacology
Peptide Hydrolases: AD, administration & dosage
Peptide Hydrolases: PD, pharmacology
Rheology

Sinusitis: PP, physiopathology

CAS REGISTRY NO.: **2387-59-9 (Carbocysteine); 70458-96-7**
(Norfloxacin)
CHEMICAL NAME: EC 3.4 (Peptide Hydrolases); EC 3.4.- (serratiopeptidase)
L41 ANSWER 19 OF 67 MEDLINE on STN
ACCESSION NUMBER: 89307676 MEDLINE
DOCUMENT NUMBER: 89307676 PubMed ID: 2744910
TITLE: Identification of subpopulations of bronchitic patients for
suitable therapy by a dynamic rheological test.
AUTHOR: Braga P C; Allegra L; Bossi R; Guffanti E E; Scarpazza G;
Bisetti A; Spada E; Fumagalli G
CORPORATE SOURCE: Department of Pharmacology, School of Medicine, University
of Milan, Italy.
SOURCE: INTERNATIONAL JOURNAL OF CLINICAL PHARMACOLOGY RESEARCH,
(1989) 9 (3) 175-82.
Journal code: 8110183. ISSN: 0251-1649.
PUB. COUNTRY: Switzerland
DOCUMENT TYPE: (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198908
ENTRY DATE: Entered STN: 19900309
Last Updated on STN: 19970203
Entered Medline: 19890814

ABSTRACT:
The rheological properties of bronchial mucus samples, collected from randomly selected patients with chronic bronchitis by protected expectoration, under steady-state conditions without any exacerbation, were investigated in a double-blind multicentre study before and after five days of treatment with 4.5 g/day carbocysteine or with glucose as a placebo. Viscous and elastic properties of the mucus were measured with a rheometer fitted with coaxial cylinders set up in an oscillating instead of a rotating mode. The shapes of the ellipses obtained characterized the rheological properties of each bronchial mucus sample before and after treatment. Two different rheological patterns were observed. In the group of patients with initial viscosity greater than or equal to 10,000 mPa.s-1, carbocysteine treatment reduced viscosity and elasticity more than those of the placebo-treated patients. In the group of patients with viscosity lower than 10,000 mPa.s-1, the rheological modifications were the same for both groups. These results are discussed in terms of both the efficacy of carbocysteine and the necessity of rheological characterization of the patients before treatment into different groups, according to the rheological properties of their secretions, for better and targetted therapy with mucus modifying drugs.

CONTROLLED TERM: Check Tags: Human
Adult
Aged
*Bronchitis: DI, diagnosis
Bronchitis: TH, therapy
Carbocysteine: PD, pharmacology
Elasticity
Middle Age
*Mucus: PP, physiopathology
Rheology
Viscosity
CAS REGISTRY NO.: **2387-59-9 (Carbocysteine)**

L41 ANSWER 20 OF 67 MEDLINE on STN
ACCESSION NUMBER: 91315222 MEDLINE
DOCUMENT NUMBER: 91315222 PubMed ID: 3155012

TITLE: [Carbocysteine-sobrerol combination and exacerbation of chronic bronchitis].
Associazione carbocisteina-sobrerolo e riacutizzazioni della bronchite cronica.

AUTHOR: Pasturenzi L; Donnetta A M; Gualtieri G; Luisetti M

SOURCE: ARCHIVIO MONALDI PER LE MALATTIE DEL TORACE, (1988 Nov-Dec) 43 (6) 487-505. Ref: 45
Journal code: 8902999. ISSN: 1120-0391.

PUB. COUNTRY: Italy

DOCUMENT TYPE: (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)

LANGUAGE: Italian

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199108

ENTRY DATE: Entered STN: 19910913
Last Updated on STN: 19910913
Entered Medline: 19910829

CONTROLLED TERM: Check Tags: Comparative Study; Human
Ambroxol: TU, therapeutic use
Amoxicillin: AD, administration & dosage
Amoxicillin: TU, therapeutic use
***Bronchitis: DT, drug therapy**
*Carbocysteine: AD, administration & dosage
Cefuroxime: AD, administration & dosage
Cefuroxime: TU, therapeutic use
Chronic Disease
Drug Therapy, Combination
English Abstract
*Expectorants: AD, administration & dosage
*Terpenes: AD, administration & dosage
Time Factors

CAS REGISTRY NO.: 18683-91-5 (Ambroxol); **2387-59-9 (Carbocysteine)**;
26787-78-0 (Amoxicillin); 498-71-5 (sobrerol); 55268-75-2 (Cefuroxime)

CHEMICAL NAME: 0 (Expectorants); 0 (Terpenes)

L41 ANSWER 21 OF 67 MEDLINE on STN

ACCESSION NUMBER: 89100485 MEDLINE

DOCUMENT NUMBER: 89100485 PubMed ID: 3062806

TITLE: [Comparative evaluation of the effectiveness of lasolvan and mucodine in chronic nonspecific lung diseases].
Sravnitel'naia otsenka effektivnosti lasol'vana i mukodina pri khronicheskikh nespetsificheskikh zabolevaniyakh legkikh.

AUTHOR: Solopov V N; Kolganova N A

SOURCE: SOVETSKAIA MEDITSINA, (1988) (5) 69-72.
Journal code: 0404525. ISSN: 0038-5077.

PUB. COUNTRY: USSR

DOCUMENT TYPE: (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: Russian

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198902

ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 20000303
Entered Medline: 19890222

CONTROLLED TERM: Check Tags: Comparative Study; Human
*Ambroxol: TU, therapeutic use
*Asthma: DT, drug therapy
*Bromhexine: AA, analogs & derivatives
***Bronchitis: DT, drug therapy**

*Carbocysteine: TU, therapeutic use
Chronic Disease
Clinical Trials
*Cysteine: AA, analogs & derivatives
CAS REGISTRY NO.: 18683-91-5 (Ambroxol); 2387-59-9 (Carbocysteine);
3572-43-8 (Bromhexine); 52-90-4 (Cysteine)

L41 ANSWER 22 OF 67 MEDLINE on STN
ACCESSION NUMBER: 86062057 MEDLINE
DOCUMENT NUMBER: 86062057 PubMed ID: 4067726
TITLE: Effects of carbocysteine on experimental chronic sinusitis
caused by long-term exposure to SO2.
AUTHOR: Ohashi Y; Nakai Y; Koshimo H; Ikeoka H; Maruoka K; Takagi K
SOURCE: NIPPON JIBIINKOKA GAKKAI KAIHO [JOURNAL OF THE
OTO-RHINO-LARYNGOLOGICAL SOCIETY OF JAPAN], (1985 Aug) 88
(8) 1056-60.
Journal code: 7505728. ISSN: 0030-6622.

PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Japanese
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198601
ENTRY DATE: Entered STN: 19900321
Last Updated on STN: 20000303
Entered Medline: 19860114

CONTROLLED TERM: Check Tags: Animal
*Carbocysteine: TU, therapeutic use
Chronic Disease
*Cysteine: AA, analogs & derivatives
English Abstract
*Maxillary Sinus: UL, ultrastructure
Microscopy, Electron
Rabbits
Sinusitis: CI, chemically induced
*Sinusitis: PA, pathology
*Sulfur Dioxide: TO, toxicity
CAS REGISTRY NO.: 2387-59-9 (Carbocysteine); 52-90-4 (Cysteine);
7446-09-5 (Sulfur Dioxide)

L41 ANSWER 23 OF 67 MEDLINE on STN
ACCESSION NUMBER: 86077525 MEDLINE
DOCUMENT NUMBER: 86077525 PubMed ID: 3907681
TITLE: Long-term oral carbocisteine therapy in patients with
chronic bronchitis. A double blind trial with placebo
control.
AUTHOR: Grillage M; Barnard-Jones K
SOURCE: BRITISH JOURNAL OF CLINICAL PRACTICE, (1985 Oct) 39 (10)
395-8.
Journal code: 0372546. ISSN: 0007-0947.

PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198602
ENTRY DATE: Entered STN: 19900321
Last Updated on STN: 20000303
Entered Medline: 19860212

CONTROLLED TERM: Check Tags: Human
Adult
*Bronchitis: DT, drug therapy
Bronchitis: PP, physiopathology

Carbocysteine: AE, adverse effects
*Carbocysteine: TU, therapeutic use
Clinical Trials
*Cysteine: AA, analogs & derivatives
Double-Blind Method
Peak Expiratory Flow Rate

CAS REGISTRY NO.: ~~2387-59-9~~ (Carbocysteine); 52-90-4 (Cysteine)

L41 ANSWER 24 OF 67 MEDLINE on STN
ACCESSION NUMBER: 85305322 MEDLINE
DOCUMENT NUMBER: 85305322 PubMed ID: 4037622
TITLE: [Changes in IgA levels in nasal mucus after upper
respiratory tract diseases in infants treated with
carbocysteine].
Modifications du taux des IgA du mucus nasal au decours des
affections des voies aeriennes superieures du nourrisson
traitees par la carbocisteine.
AUTHOR: Henocq A; Moreau C; Mallet E; Sauger F; de Menibus C H
SOURCE: ANNALES D OTO-LARYNGOLOGIE ET DE CHIRURGIE CERVICO-FACIALE,
(1985) 102 (5) 373-5.
Journal code: 9431026. ISSN: 0003-438X.
PUB. COUNTRY: France
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198510
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 20000303
Entered Medline: 19851007

ABSTRACT:

The authors have studied IgA level in nasal mucus of children, either not
treated-controls, or treated with carbocysteine. All had common rhinobronchial
diseases. They have noted a significant increase in IgA level in the treated
group, from the 7th day.

CONTROLLED TERM: Check Tags: Human
*Carbocysteine: TU, therapeutic use
Child, Preschool
*Cysteine: AA, analogs & derivatives
English Abstract
*Immunoglobulin A, Secretory: AN, analysis
Infant
*Nasal Mucosa: IM, immunology
*Respiratory Tract Infections: DT, drug therapy
Respiratory Tract Infections: IM, immunology
Time Factors

CAS REGISTRY NO.: ~~2387-59-9~~ (Carbocysteine); 52-90-4 (Cysteine)
CHEMICAL NAME: 0 (Immunoglobulin A, Secretory)

L41 ANSWER 25 OF 67 MEDLINE on STN
ACCESSION NUMBER: 86058159 MEDLINE
DOCUMENT NUMBER: 86058159 PubMed ID: 4066083
TITLE: Comparison between penetration of amoxicillin combined with
carbocysteine and amoxicillin alone in pathological
bronchial secretions and pulmonary tissue.
AUTHOR: Braga P C; Scaglione F; Scarpazza G; Fraticelli G; Roviato
G; Varoli F; Mariani C; Falchi M; Fraschini F
SOURCE: INTERNATIONAL JOURNAL OF CLINICAL PHARMACOLOGY RESEARCH,
(1985) 5 (5) 331-40.
Journal code: 8110183. ISSN: 0251-1649.
PUB. COUNTRY: Switzerland
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals

ENTRY MONTH: 198601
ENTRY DATE: Entered STN: 19900321
Last Updated on STN: 20000303
Entered Medline: 19860108

ABSTRACT:

Patients with chronic bronchitis were treated orally with either amoxicillin (500 mg) alone or in combination with carbocysteine (150 mg), thrice daily for five days, in order to assess whether the combination allows higher antibiotic levels to be obtained in bronchial mucus than those obtained from amoxicillin alone. Serum and mucus levels were determined for each patient at first and fifth day of the two drug regimens. The levels of amoxicillin in the lung tissue collected in patients undergoing pulmonary surgery were also determined after a single oral dose of amoxicillin (1 g) or of amoxicillin (1 g) plus carbocysteine (300 mg). In the bronchial secretions, at the same plasma concentrations, amoxicillin levels were statistically higher after administration of combined substances. These findings indicate the presence of a pharmacokinetic synergism between these compounds, which allows amoxicillin to penetrate more easily through the hemato-bronchial barrier. The association of amoxicillin and carbocysteine, determining an increase of the quantitative levels of antibiotic in the bronchial secretion (also if it is purulent), performs a sterilizing action in a short time with significant therapeutic advantages.

CONTROLLED TERM: Check Tags: Female; Human; Male
Aged
Amoxicillin: AD, administration & dosage
*Amoxicillin: TU, therapeutic use
Bronchi: BS, blood supply
*Bronchi: SE, secretion
*Bronchitis: DT, drug therapy
Bronchitis: MI, microbiology
Bronchitis: PA, pathology
Carbocysteine: AD, administration & dosage
*Carbocysteine: TU, therapeutic use
*Cysteine: AA, analogs & derivatives
Drug Interactions
Drug Therapy, Combination
*Lung: PA, pathology
Middle Age
Mucus: SE, secretion
CAS REGISTRY NO.: ~~2387-59-9~~ (Carbocysteine); 26787-78-0
(Amoxicillin); 52-90-4 (Cysteine)

L41 ANSWER 26 OF 67 MEDLINE on STN
ACCESSION NUMBER: 85283257 MEDLINE
DOCUMENT NUMBER: 85283257 PubMed ID: 4028471
TITLE: Reversibility of reduced mucociliary clearance in chronic sinusitis.
AUTHOR: Sakakura Y; Majima Y; Saida S; Ukai K; Miyoshi Y
SOURCE: CLINICAL OTOLARYNGOLOGY, (1985 Apr) 10 (2) 79-83.
Journal code: 7701793. ISSN: 0307-7772.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198509
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 19900320
Entered Medline: 19850927

ABSTRACT:

Nasal mucociliary clearance was measured before and after treatment in patients with chronic sinusitis. Nasal mucociliary transit time before the study was greater than 36 min in 8 out of 14 patients who were treated with S-carboxymethylcysteine, and in 9 out of 22 patients who were treated by

repeated antral lavage. The nasal mucociliary clearance was significantly improved by both treatment regimens. This may indicate that the malfunction of the nasal mucociliary system is not the cause of chronic sinusitis but an effect of chronic inflammation of the respiratory mucosa.

CONTROLLED TERM: Check Tags: Female; Human; Male; Support, Non-U.S. Gov't
Adolescent
Adult
Aged
Biological Transport
Carbocysteine: TU, therapeutic use
Chronic Disease
Cilia: PH, physiology
Irrigation
Middle Age
*Mucus: SE, secretion
*Nasal Mucosa: PP, physiopathology
*Sinusitis: PP, physiopathology
Sinusitis: TH, therapy

CAS REGISTRY NO.: **2387-59-9 (Carbocysteine)**

L41 ANSWER 27 OF 67 MEDLINE on STN
ACCESSION NUMBER: 86268238 MEDLINE
DOCUMENT NUMBER: 86268238 PubMed ID: 3836611
TITLE: [Effect of S-carboxymethylcysteine on the concentration of antibiotics in bronchial secretions and its therapeutic effects].
Studio dell'attivita della S-carbossimetilcisteina sulle concentrazioni di antibiotici nel secreto bronchiale ed effetti terapeutici.

AUTHOR: Pirali F; Ravizzola G; Santus G; Inzoli M R; Turano A
SOURCE: ARCHIVIO MONALDI PER LA TISIOLOGIA E LE MALATTIE DELL APPARATO RESPIRATORIO, (1985 Jan-Apr) 40 (1-2) 3-18.
Journal code: 1263173. ISSN: 0004-0185.

PUB. COUNTRY: Italy
DOCUMENT TYPE: (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)

LANGUAGE: Italian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198608
ENTRY DATE: Entered STN: 19900321
Last Updated on STN: 20000303
Entered Medline: 19860821

CONTROLLED TERM: Check Tags: Female; Human; Male
Aged
Antibiotics: ME, metabolism
Bronchopneumonia: DT, drug therapy
*Bronchopneumonia: ME, metabolism
*Carbocysteine: PD, pharmacology
*Cysteine: AA, analogs & derivatives
Drug Therapy, Combination
English Abstract
Middle Age
Sputum: ME, metabolism

CAS REGISTRY NO.: **2387-59-9 (Carbocysteine); 52-90-4 (Cysteine)**
CHEMICAL NAME: 0 (Antibiotics)

L41 ANSWER 28 OF 67 MEDLINE on STN
ACCESSION NUMBER: 84056299 MEDLINE
DOCUMENT NUMBER: 84056299 PubMed ID: 6641103
TITLE: [Ambroxol in bronchopulmonary pathology in children].
Ambroxol nella patologia broncopulmonare del bambino.

AUTHOR: Berni M; Collina A; Zavattini G

SOURCE: CLINICA TERAPEUTICA, (1983 Sep 15) 106 (5) 351-5.
Journal code: 0372604. ISSN: 0009-9074.

PUB. COUNTRY: Italy
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Italian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198401
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 19900319
Entered Medline: 19840107

CONTROLLED TERM: Check Tags: Comparative Study; Female; Human; Male
*Ambroxol: TU, therapeutic use
*Bromhexine: AA, analogs & derivatives
*Bronchial Diseases: DT, drug therapy
Bronchitis: DT, drug therapy
Carbocysteine: TU, therapeutic use
Child
Child, Preschool
Cough: DT, drug therapy
Dyspnea: DT, drug therapy
English Abstract

CAS REGISTRY NO.: 18683-91-5 (Ambroxol); **2387-59-9 (Carbocysteine);**
3572-43-8 (Bromhexine)

L41 ANSWER 29 OF 67 MEDLINE on STN
ACCESSION NUMBER: 82233578 MEDLINE
DOCUMENT NUMBER: 82233578 PubMed ID: 7093981
TITLE: Pharmacokinetic behavior of S-carboxymethylcysteine-Lys in
patients with chronic bronchitis.

AUTHOR: Braga P C; Borsa M; De Angelis L; Bossi R; Allegra L;
Scaglione F; Scarpazza G

SOURCE: CLINICAL THERAPEUTICS, (1982) 4 (6) 480-8.
Journal code: 7706726. ISSN: 0149-2918.

PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198209
ENTRY DATE: Entered STN: 19900317
Last Updated on STN: 20000303
Entered Medline: 19820924

ABSTRACT:

A mass fragmentographic technique was used to study the pharmacokinetic behavior of SCMC-Lys in patients with acute exacerbations of chronic bronchitis and with dense expectoration. Serum and urine levels, as well as bronchial mucus levels and their correlations, were determined. The data suggest that SCMC-Lys diffuses well into bronchial mucus, a useful feature for a mucolytic drug.

CONTROLLED TERM: Check Tags: Human
Bronchi: ME, metabolism
***Bronchitis: DT, drug therapy**
*Carbocysteine: AA, analogs & derivatives
Carbocysteine: ME, metabolism
Carbocysteine: TU, therapeutic use
Chronic Disease
*Cysteine: AA, analogs & derivatives
Kinetics
Mass Fragmentography
Mucus: ME, metabolism

CAS REGISTRY NO.: **2387-59-9 (Carbocysteine);** 52-90-4 (Cysteine);
82951-55-1 (carbocysteine-lysine)

L41 ANSWER 30 OF 67 MEDLINE on STN

Searched by Barb O'Bryen, STIC 308-4291

ACCESSION NUMBER: 82202735 MEDLINE
DOCUMENT NUMBER: 82202735 PubMed ID: 7080939
TITLE: Effect of S-carboxymethylcysteine on the biophysical and biochemical properties of mucus in chronic bronchitics..
AUTHOR: Cox A; Jabbal-Gill I; Marriott C; Davis S S
SOURCE: ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY, (1982) 144 423-9.

Journal code: 0121103. ISSN: 0065-2598.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198207
ENTRY DATE: Entered STN: 19900317

Last Updated on STN: 20000303
Entered Medline: 19820708
CONTROLLED TERM: Check Tags: Human
*Bronchitis: PP, physiopathology
*Carbocysteine: PD, pharmacology
Chronic Disease
*Cysteine: AA, analogs & derivatives
Double-Blind Method
Glycoproteins: ME, metabolism
*Mucus: DE, drug effects
Mucus: ME, metabolism
Mucus: PH, physiology
*Sputum: DE, drug effects
Sputum: PH, physiology
Viscosity

CAS REGISTRY NO.: 2387-59-9; (Carbocysteine); 52-90-4 (Cysteine)
CHEMICAL NAME: 0-(Glycoproteins)

L41 ANSWER 31 OF 67

MEDLINE on STN
ACCESSION NUMBER: 83022658 MEDLINE
DOCUMENT NUMBER: 83022658 PubMed ID: 7126331
TITLE: [Serum and bronchial concentrations of amoxicillin administered with a bronchial fluidizer].
Osservazioni sperimentali sulle concentrazioni sieriche e bronchiali dell'amoxicillina somministrata in associazione ad un fluidificante bronchiale.
AUTHOR: Concia E; Dos Santos C; Marone P; Sardi C; Cremaschi P
SOURCE: BOLLETTINO DELL ISTITUTO SIEROTERAPICO MILANESE, (1982 Mar) 61 (1) 64-70.
Journal code: 17720040R. ISSN: 0021-2547.
PUB. COUNTRY: Italy
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Italian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198212
ENTRY DATE: Entered STN: 19900317
Last Updated on STN: 20000303
Entered Medline: 19821218

ABSTRACT:

The authors compared the serum and bronchial concentration of amoxycillin administered alone and in association with carboxymethylcysteine. The determinations were carried out in 10 patients affected with exacerbated acute and chronic bronchopneumopathies, treated first with amoxycillin alone (15 g/day in 3 administrations) and then with amoxycillin at the same dosage and carboxymethylcysteine (450 mg/day in 3 administrations). The bronchial secretions were collected during bronchoscopy performed 2 hours after the last administration of antibiotic. The bronchial secretion values of amoxycillin administered alone varied from 0.92 mcg/ml to 1.88 mcg/ml with a mean value of 1.44 mcg/ml. The percentage ratio between levels in bronchial secretion and

levels in the serum varied from 12.7 to 36.1 with a mean value of 23.2. The administration of the amoxycillin-fluidizing agent association determined a statistically significant increase of the antibiotic levels in the bronchial secretions, varying from 1.26 mcg/ml to 6.39 mcg/ml, with a percentage ratio from 19.6 to 103.0.

CONTROLLED TERM: Check Tags: Human
Amoxicillin: AD, administration & dosage
Amoxicillin: BL, blood
*Amoxicillin: ME, metabolism
*Bronchi: ME, metabolism
Bronchi: SE, secretion
Bronchopneumonia: DT, drug therapy
*Carbocysteine: ME, metabolism
*Cysteine: AA, analogs & derivatives
Drug Interactions
English Abstract
*Expectorants
Mathematics
Tissue Distribution
CAS REGISTRY NO.: ~~2387-59-9~~ (Carbocysteine); 26787-78-0
(Amoxicillin); 52-90-4 (Cysteine)
CHEMICAL NAME: 0 (Expectorants)

L41 ANSWER 32 OF 67 MEDLINE on STN
ACCESSION NUMBER: 81272536 MEDLINE
DOCUMENT NUMBER: 81272536 PubMed ID: 7022385
TITLE: [Mucodine in the treatment of chronic bronchitis].
Zastosowanie mukodyny w leczeniu przewleklego zapalenia
oskrzeli.
AUTHOR: Wierzbicka M; Wojcik R A
SOURCE: PNEUMONOLOGIA POLSKA, (1981) 49 (5) 369-76.
Journal code: 7605692. ISSN: 0376-4761.
PUB. COUNTRY: Poland
DOCUMENT TYPE: (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Polish
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198110
ENTRY DATE: Entered STN: 19900316
Last Updated on STN: 20000303
Entered Medline: 19811029
CONTROLLED TERM: Check Tags: Female; Human; Male
Adolescent
Adult
Aged

*Bronchitis: DT, drug therapy
*Carbocysteine: TU, therapeutic use
Chronic Disease
Clinical Trials
*Cysteine: AA, analogs & derivatives
Double-Blind Method
English Abstract
Middle Age
Placebos
CAS REGISTRY NO.: ~~2387-59-9~~ (Carbocysteine); 52-90-4 (Cysteine)
CHEMICAL NAME: 0 (Placebos)

L41 ANSWER 33 OF 67 MEDLINE on STN
ACCESSION NUMBER: 81237546 MEDLINE
DOCUMENT NUMBER: 81237546 PubMed ID: 7250579
TITLE: [Absorption, elimination and therapeutic effectiveness of a
new antibiotic and mucolytic combination for oral
administration].

Studio sull'assorbimento, sull'eliminazione e sulla
efficacia clinica di una nuova associazione
antibiotico-mucolitica per via orale.

AUTHOR: Silvia G; Giambrone F; Battaglia E; Romano M
SOURCE: GIORNALE DI CLINICA MEDICA, (1981 Mar) 62 (3) 209-27.
Journal code: 0413411. ISSN: 0017-0275.

PUB. COUNTRY: Italy
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Italian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198109
ENTRY DATE: Entered STN: 19900316
Last Updated on STN: 20000303
Entered Medline: 19810922

CONTROLLED TERM: Check Tags: Female; Human; Male
Adult
Aged
*Bacterial Infections: DT, drug therapy
 Bronchitis: DT, drug therapy
 Bronchopneumonia: DT, drug therapy
 Carbocysteine: AD, administration & dosage
 Carbocysteine: ME, metabolism
*Carbocysteine: TU, therapeutic use
 Cefadroxil
 Cephalexin: AD, administration & dosage
*Cephalexin: AA, analogs & derivatives
 Cephalexin: ME, metabolism
 Cephalexin: TU, therapeutic use
*Cysteine: AA, analogs & derivatives
 Drug Therapy, Combination
 English Abstract
 Middle Age
 ***Respiratory Tract Infections: DT, drug therapy**

CAS REGISTRY NO.: 15686-71-2 (Cephalexin); 2387-59-9 (Carbocysteine)
; 50370-12-2 (Cefadroxil); 52-90-4 (Cysteine)

L41 ANSWER 34 OF 67 MEDLINE on STN
ACCESSION NUMBER: 81177684 MEDLINE
DOCUMENT NUMBER: 81177684 PubMed ID: 7013137
TITLE: [Optimal use of expectorants (current trends)].
Optimal'noe primenienie otkharkivaiushchikh preparatov
(sovremennye tendentsii).

AUTHOR: Mirrakhimov M M; Brimkulov N N; Rafibekova Zh S
SOURCE: TERAPEVTICHESKII ARKHIV, (1981) 53 (1) 110-7. Ref: 114
Journal code: 2984818R. ISSN: 0040-3660.

PUB. COUNTRY: USSR
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: Russian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198106
ENTRY DATE: Entered STN: 19900316
Last Updated on STN: 20000303
Entered Medline: 19810613

CONTROLLED TERM: Check Tags: Human; In Vitro
Biological Transport
*Bromhexine: TU, therapeutic use
 Bronchi: SE, secretion
 ***Bronchitis: DT, drug therapy**
*Carbocysteine: TU, therapeutic use
 Chronic Disease
*Cysteine: AA, analogs & derivatives
 Elasticity

Sputum: DE, drug effects
Sputum: ME, metabolism
Viscosity

CAS REGISTRY NO.: ~~2387-59-9~~ (Carbocysteine); 3572-43-8
(Bromhexine); 52-90-4 (Cysteine)

L41 ANSWER 35 OF 67 MEDLINE on STN
ACCESSION NUMBER: 79221195 MEDLINE
DOCUMENT NUMBER: 79221195 PubMed ID: 460097
TITLE: [Changes in sputum in catarrhal bronchitis in children
after treatment with S-carboxymethylcysteine (viscosimetric
studies)].
Modificazioni dell'escreato nella bronchite catarrale in
eta pediatrica dopo trattamento con S-
carbossimetilcisteina. (Indagine viscosimetrica).
AUTHOR: Castello D; Costa G; De Candussio G
SOURCE: MINERVA PEDIATRICA, (1979 Mar 15) 31 (5) 371-80.
Journal code: 0400740. ISSN: 0026-4946.
PUB. COUNTRY: Italy
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Italian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197909
ENTRY DATE: Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19790925

CONTROLLED TERM: Check Tags: Female; Human; Male
Administration, Oral
*Bronchitis: DT, drug therapy
Carbocysteine: AD, administration & dosage
*Carbocysteine: TU, therapeutic use
Child
Child, Preschool
*Cysteine: AA, analogs & derivatives
Drug Evaluation
English Abstract
Infant
Viscosity

CAS REGISTRY NO.: ~~2387-59-9~~ (Carbocysteine); 52-90-4 (Cysteine)

L41 ANSWER 36 OF 67 MEDLINE on STN
ACCESSION NUMBER: 79106561 MEDLINE
DOCUMENT NUMBER: 79106561 PubMed ID: 367726
TITLE: Effects of S-carboxymethylcysteine on tracheal mucus
velocity.
AUTHOR: Goodman R M; Yergin B M; Sackner M A
SOURCE: CHEST, (1978 Dec) 74 (6) 615-8.
Journal code: 0231335. ISSN: 0012-3692.
PUB. COUNTRY: United States
DOCUMENT TYPE: (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 197904
ENTRY DATE: Entered STN: 19900315
Last Updated on STN: 19980206
Entered Medline: 19790425

ABSTRACT:
The effects of S-carboxymethylcysteine on tracheal mucus velocity were assessed
in a double blind crossover study between 2 grams S-carboxymethylcysteine and
placebo. Subjects included six healthy non-smokers, eight smokers with small
airway disease and chronic simple bronchitis, and eight subjects with chronic

obstructive bronchitis. Tracheal mucus velocity was measured prior to and two and three hours after each subject had ingested S-carboxymethylcysteine or placebo. No significant change in tracheal mucus velocity occurred after placebo or S-carboxymethylcysteine in any of the groups, indicating that the drug has no acute effect on mucus transport.

CONTROLLED TERM: Check Tags: Female; Human; Male; Support, U.S. Gov't, P.H.S.
Adult

Bronchitis: DT, drug therapy

*Carbocysteine: PD, pharmacology

Carbocysteine: TU, therapeutic use

Chronic Disease

Clinical Trials

*Cysteine: AA, analogs & derivatives

Lung Diseases, Obstructive: DT, drug therapy

Middle Age

*Mucus: DE, drug effects

Smoking

*Trachea: DE, drug effects

CAS REGISTRY NO.: **2387-59-9 (Carbocysteine); 52-90-4 (Cysteine)**

L41 ANSWER 37 OF 67

MEDLINE on STN

ACCESSION NUMBER: 79085799 MEDLINE

DOCUMENT NUMBER: 79085799 PubMed ID: 365537

TITLE: Effect of the mucoregulator S-carboxy-methyl-cysteine in patients with chronic bronchitis.

AUTHOR: Puchelle E; Aug F; Polu J M

SOURCE: EUROPEAN JOURNAL OF CLINICAL PHARMACOLOGY, (1978 Nov 27) 14 (3) 177-84.

Journal code: 1256165. ISSN: 0031-6970.

PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of

DOCUMENT TYPE: (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197903

ENTRY DATE: Entered STN: 19900315

Last Updated on STN: 19900315

Entered Medline: 19790313

ABSTRACT:

Twenty patients with stable chronic bronchitis entered a double-blind study in which changes in clinical and respiratory function and biochemical and rheological variations were examined after treatment with the mucoregulator S-carboxy-methyl-cysteine (S.C.M.C.). After one week of single-blind placebo, a two week double-blind study was initiated with placebo or oral S.C.M.C. 3 g/24h. After two weeks, a significant clinical improvement was observed in patients treated with S.C.M.C. During treatment, there was no change in respiratory function, although a drop in FEV1/VC was noted in the placebo group. A significant increase in the viscosity of the expectorations was observed after treatment with S.C.M.C. for two weeks. The levels of secretory IgA and of serum albumin in the expectorations remained stable, whereas in the placebo group, there was a slight but significant increase in serum albumin. In this group of non-infected chronic bronchitic patients, S.C.M.C. appeared to normalize the secretory function of the bronchial mucosa by preventing inflammation and enhancing the viscoelastic properties of bronchial secretions.

CONTROLLED TERM: Check Tags: Human; Male

Aged

***Bronchitis: DT, drug therapy**

Bronchitis: MI, microbiology

Bronchitis: PP, physiopathology

Carbocysteine: AE, adverse effects

*Carbocysteine: TU, therapeutic use

Chronic Disease
Clinical Trials
*Cysteine: AA, analogs & derivatives
Double-Blind Method
Middle Age
Placebos
Respiratory Function Tests
Sputum: AN, analysis
Sputum: DE, drug effects
Sputum: MI, microbiology
CAS REGISTRY NO.: ~~2387-59-9~~ 9: (Carbocysteine); 52-90-4 (Cysteine)
CHEMICAL NAME: 0 (Placebos)

L41 ANSWER 38 OF 67 MEDLINE on STN
ACCESSION NUMBER: 77107156 MEDLINE
DOCUMENT NUMBER: 77107156 PubMed ID: 797159
TITLE: [The treatment of bronchitic syndrome using Transbronchin
in the practice].
Die Behandlung des bronchitischen Syndroms mit
Transbronchin in der Praxis.
AUTHOR: Plietz J
SOURCE: ZFA. ZEITSCHRIFT FUR ALLGEMEINMEDIZIN, (1976 Dec 20) 52
(35) 1832-4.
Journal code: 7613263. ISSN: 0341-9835.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: German
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197703
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19900313
Entered Medline: 19770321
CONTROLLED TERM: Check Tags: Female; Human; Male
Adolescent
Adult
Aged
*Bronchitis: DT, drug therapy
*Carbocysteine: TU, therapeutic use
Clinical Trials
*Cysteine: AA, analogs & derivatives
Middle Age
Syndrome
CAS REGISTRY NO.: ~~2387-59-9~~ 9: (Carbocysteine); 52-90-4 (Cysteine)

L41 ANSWER 39 OF 67 MEDLINE on STN
ACCESSION NUMBER: 77025332 MEDLINE
DOCUMENT NUMBER: 77025332 PubMed ID: 789027
TITLE: S-carboxymethylcysteine in the fluidification of sputum and
treatment of chronic airway obstruction.
AUTHOR: Edwards G F; Steel A E; Scott J K; Jordan J W
SOURCE: CHEST, (1976 Oct) 70 (4) 506-13.
Journal code: 0231335. ISSN: 0012-3692.
PUB. COUNTRY: United States
DOCUMENT TYPE: (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 197612
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19980206
Entered Medline: 19761223

ABSTRACT:

The clinical results and changes in sputum found in both a short-term inpatient trial and a subsequent long-term outpatient investigation (three-month double-blind controlled study) of 82 patients with chronic bronchitis treated with a new mucolytic agent, S-carboxymethylcysteine (Mucodyne), are reported. Fluidification of sputum with reduction in certain measurements of the viscosity of morning sputum aliquots, associated with improvement in the ability to cough up bronchial secretions, significant increase in sputum volume output, and improvement in ventilation (as estimated by the forced expiratory volume in one second), were observed in both trials as dose-related responses, with an increase in the ease of expectoration and a reduction in cough frequency and dyspnea. Therapy with S-carboxymethylcysteine was well tolerated, and there were no serious adverse effects, either immediate or delayed. We suggest that the effect of the drug in fluidifying sputum may be due to a mucoregulatory mechanism which reverses the sputum macromolecular disturbances seen in chronic bronchitis.

CONTROLLED TERM: Check Tags: Female; Human; Male
Administration, Oral
Adult
*Bronchitis: DT, drug therapy
Carbocysteine: AD, administration & dosage
Carbocysteine: PD, pharmacology
*Carbocysteine: TU, therapeutic use
Chronic Disease
Clinical Trials
*Cysteine: AA, analogs & derivatives
Forced Expiratory Volume
Humidity
Middle Age
Respiratory Therapy
*Sputum: DE, drug effects
Viscosity
Vital Capacity
CAS REGISTRY NO.: 2387-59-9 (Carbocysteine); 52-90-4 (Cysteine)

L41 ANSWER 40 OF 67 MEDLINE on STN
ACCESSION NUMBER: 75175470 MEDLINE
DOCUMENT NUMBER: 75175470 PubMed ID: 1134660
TITLE: [Studies of the clinical effectiveness of the mucolytic drug, S-carboxymethylcysteine, in the therapy of acute and chronic bronchitis].
Indagine sull'efficacia clinica del mucolitico S-carbossimetilcisteine nella terapia delle bronchiti acute e croniche.
AUTHOR: Magliulo E; Bonizzoni D; Cattaneo E; Scevola D; Concia E
SOURCE: MINERVA MEDICA, (1975 Apr 4) 66 (25) 1187-97.
Journal code: 0400732. ISSN: 0026-4806.
PUB. COUNTRY: Italy
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Italian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197508
ENTRY DATE: Entered STN: 19900310
Last Updated on STN: 19900310
Entered Medline: 19750820
CONTROLLED TERM: Check Tags: Human; Male
Acute Disease
Adult
Aged
*Bronchitis: DT, drug therapy
*Carbocysteine: TU, therapeutic use
Chronic Disease
*Cysteine: AA, analogs & derivatives

*Expectorants: TU, therapeutic use
Middle Age
CAS REGISTRY NO.: 2387-59-9 (Carbocysteine); 52-90-4 (Cysteine)
CHEMICAL NAME: 0 (Expectorants)

L41 ANSWER 41 OF 67 MEDLINE on STN
ACCESSION NUMBER: 76154723 MEDLINE
DOCUMENT NUMBER: 76154723 PubMed ID: 769242
TITLE: No demonstrable effect of S-carboxymethylcysteine on
clearance of secretions from the human lung.
AUTHOR: Thomson M L; Pavia D; Jones C J; McQuiston T A
SOURCE: THORAX, (1975 Dec) 30 (6) 669-73.
Journal code: 0417353. ISSN: 0040-6376.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197606
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19980206
Entered Medline: 19760602

ABSTRACT:
The mucolytic efficacy of S-carboxymethylcysteine has been assessed in a double-blind crossover trial in 16 patients with chronic obstructive bronchitis. No significant difference was found between drug and placebo after four or seven days' treatment in the rate of clearance of secretions from the lung. This was measured by external counting of previously inhaled polystyrene tracer particles tagged with technetium-99m (99mTc). Lateral scans across the right chest after inhaling the aerosol showed equal penetration of particles towards the periphery of the lung in drug and placebo runs; this indicated that the airways had not been cleared of mucus by the drug. There was no significant difference between drug and placebo runs in the number of coughs or the weight and radioactive content of sputum voided or raised at the end of the run by chest percussion and postural drainage. Ventilatory capacity was not significantly changed nor was there any subjective improvement in the patients as a result of taking the drug.

CONTROLLED TERM: Check Tags: Human; Male
Aged
*Bronchitis: DT, drug therapy
Bronchitis: PP, physiopathology
Carbocysteine: AD, administration & dosage
*Carbocysteine: TU, therapeutic use
Clinical Trials
*Cysteine: AA, analogs & derivatives
Forced Expiratory Volume
Lung: AN, analysis
*Lung: SE, secretion
Middle Age
*Mucus: DE, drug effects
Sputum: AN, analysis
Vital Capacity

CAS REGISTRY NO.: 2387-59-9 (Carbocysteine); 52-90-4 (Cysteine)

L41 ANSWER 42 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 2003216831 EMBASE
TITLE: S-carboxymethylcysteine inhibits the attachment of
Streptococcus pneumoniae to human pharyngeal epithelial
cells.
AUTHOR: Cakan G.; Turkoz M.; Turan T.; Ahmed K.; Nagatake T.
CORPORATE SOURCE: K. Ahmed, Dept. of Molec. Biol. and Genetics, Bilkent
University, Ankara 06533, Turkey. ahmed@fen.bilkent.edu.tr

SOURCE: Microbial Pathogenesis, (1 Jun 2003) 34/6 (261-265).
Refs: 17
ISSN: 0882-4010 CODEN: MIPAEV
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
005 General Pathology and Pathological Anatomy
011 Otorhinolaryngology
037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT:

Streptococcus pneumoniae causes respiratory and other invasive infections. Increased resistance of this bacterium to antibiotics necessitates new approaches to the treatment of infections. Attachment of bacteria to human pharyngeal epithelial cells is the initial step in the pathogenesis of infection and S-carboxymethylcysteine (S-CMC) can modulate the attachment of Moraxella catarrhalis and nontypable Haemophilus influenzae to epithelial cells. Unlike these two, S. pneumoniae is gram-positive and has a well-defined capsule. Here we examined the effects of S-CMC on the attachment and detachment of S. pneumoniae to human pharyngeal epithelial cells in vitro. Treatment of these cells with S-CMC significantly reduced the number of attached S. pneumoniae. S-CMC also resulted in a significant increase in the detachment of already attached S. pneumoniae to epithelial cells. In addition, treatment of S. pneumoniae with S-CMC significantly reduced their ability to attach to epithelial cells, but not the number of viable bacteria. Our study shows that S-CMC modulates the attachment of S. pneumoniae to human pharyngeal epithelial cells by acting both on cells and bacteria. .COPYRG. 2003 Elsevier Science Ltd. All rights reserved.

CONTROLLED TERM: Medical Descriptors:
*bacterium adherence
*Streptococcus pneumoniae
*epithelium cell
drug efficacy
bacteriostasis
microbial adhesion
respiratory tract infection: DT, drug therapy
respiratory tract infection: ET, etiology
antimicrobial activity
infection prevention
human
nonhuman
normal human
controlled study
human cell
article
priority journal
Drug Descriptors:
*carbocysteine: DT, drug therapy
CAS REGISTRY NO.: (carbocysteine) 638-23-3

L41 ANSWER 43 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

ACCESSION NUMBER: 2002444390 EMBASE

TITLE: [Mucolytic agents for acute respiratory tract infections in infants: A pharmaco-epidemiological problem?].
FLUIDIFIANTS BRONCHIQUES DANS LES INFECTIONS RESPIRATOIRES
AIGUES DU NOURRISSON: UN PROBLEME PHARMACOEPIDEMIOLOGIQUE?.

AUTHOR: Chalumeau M.; Cheron G.; Assathiany R.; Moulin F.; Bavoux F.; Breart G.; Pons G.

CORPORATE SOURCE: M. Chalumeau, Universite Rene-Descartes, Grp. Hosp.
Cochin-S.-Vincent-de-Paul, Assistance Pub.-Hopitaux de
Paris, 74, avenue Denfert-Rochereau, 75674 Paris Cedex 14,

SOURCE: France. martin.chalumeau@wanadoo.fr
Archives de Pediatrie, (1 Nov 2002) 9/11 (1128-1136).
Refs: 55
ISSN: 0929-693X CODEN: APEDE4
PUBLISHER IDENT.: S 0929-693X(02)00091-X
COUNTRY: France
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 007 Pediatrics and Pediatric Surgery
015 Chest Diseases, Thoracic Surgery and Tuberculosis
017 Public Health, Social Medicine and Epidemiology
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: French
SUMMARY LANGUAGE: English; French
ABSTRACT:
Objectives. To study the use of mucolytics agents, i.e. acetylcystein and carbocystein, in infants. To evaluate their efficacy and safety for their main indications. Methods. A prospective one-day survey of prescriptions among 95 office-based pediatricians. A systematic review of the literature. Results. Among 1327 prescriptions regarding infants, 4.3% were mucolytics agents. Main indications were rhinopharyngitis, isolated cough, and acute bronchitis. Our review did not identify any study of rigorous methodological quality that supported the efficacy or safety of mucolytics agents in infants for their in-label (isolated cough, acute bronchitis) and off-label (rhinopharyngitis) indications. Six cases of infants, aged less than eight months, presenting paradoxical bronchial congestion during a treatment with mucolytics agents, have been reported to the French pharmacovigilance system. No causal relationship was established from these cases because of a possible protopathic bias. Discussion. Our results concerning mucolytics agents use are similar to those reported by the French Health Care Funds. In addition to the lack of studies on efficacy, no studies on the dose-response relationship were available, leading to suggested dose regimens in the French license of acetylcystein ranging from 44.4 to 16.4 mg kg⁻¹ j(-1) between one to 24 months. These dose regimens could predispose to overdosing in the youngest infants as it seems observed in the six reported cases. Conclusion. In infants, mucolytics agents efficacy has never been demonstrated and some elements suggest poor safety (paradoxical bronchial congestion). .COPYRGT. 2002 Editions scientifiques et medicales Elsevier SAS. All rights reserved.
CONTROLLED TERM: Medical Descriptors:
*respiratory tract infection: DT, drug therapy
*respiratory tract infection: EP, epidemiology
*pharmacoepidemiology
drug efficacy
drug safety
treatment indication
prospective study
prescription
pediatrician
rhinopharyngitis: DT, drug therapy
coughing: DT, drug therapy
bronchitis: DT, drug therapy
lung congestion: DT, drug therapy
drug surveillance program
financial management
dose calculation
dose response
drug overdose: SI, side effect
side effect: SI, side effect
human
major clinical study
controlled study
article

Drug Descriptors:

*mucolytic agent: AE, adverse drug reaction .

*mucolytic agent: DO, drug dose

*mucolytic agent: DT, drug therapy

acetylcysteine: AE, adverse drug reaction

acetylcysteine: DO, drug dose

acetylcysteine: DT, drug therapy

carbocysteine: DT, drug therapy

mucolator

brunkocod

carbocysteine gnr

CAS REGISTRY NO.: (acetylcysteine) 616-91-1; (carbocysteine) 638-23-3

CHEMICAL NAME: Mucomyst; Exomuc; Solmucol; Mucolator; Fluimucil; Muciclar;
Brunkocod; Rhinathiol; Carbocysteine gnr

L41 ANSWER 44 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

ACCESSION NUMBER: 2002021946 EMBASE

TITLE: Mucoactive drugs for asthma and COPD: Any place in
therapy?.

AUTHOR: Rogers D.F.

CORPORATE SOURCE: D.F. Rogers, Thoracic Medicine, National Heart/Lung,
Institute Imperial College, Dovehouse Street, London SW3
6LY, United Kingdom. duncan.rogers@ic.ac.ukSOURCE: Expert Opinion on Investigational Drugs, (2002) 11/1
(15-35).

Refs: 213

ISSN: 1354-3784 CODEN: EOIDER

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; General Review

FILE SEGMENT: 006 Internal Medicine
015 Chest Diseases, Thoracic Surgery and Tuberculosis
030 Pharmacology
036 Health Policy, Economics and Management
037 Drug Literature Index
038 Adverse Reactions Titles

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT:

Airway mucus hypersecretion is a clinical and pathophysiological feature of a number of severe respiratory conditions, including asthma and chronic obstructive pulmonary disease (COPD). The importance of mucus hypersecretion to the morbidity and mortality of asthma is acknowledged, whereas in COPD it appears to affect only certain groups of patients, particularly the elderly and those prone to chest infections. Treatment with compounds that alter mucus is perceived as a therapeutic option, in particular in continental Europe, and numerous compounds have been developed and are available for clinical use worldwide. However, acceptance (or otherwise) of these drugs in guidelines for management of asthma or COPD has been hampered by lack of information from well designed clinical trials. In addition, the mechanism of action of most of these drugs is unknown and is it likely that any beneficial effects are due to activities other than, or in addition to, effects on mucus. Current information indicates that the most effective use of mucolytic drugs is long-term therapy for reduction of exacerbations of COPD. Cost-effective treatment would be in patients with poor lung function who have frequent or prolonged exacerbations or are repeatedly admitted to hospital.

CONTROLLED TERM: Medical Descriptors:

*asthma: DM, disease management

*asthma: DT, drug therapy

*chronic obstructive lung disease: DM, disease management

*chronic obstructive lung disease: DT, drug therapy

mucus secretion

clinical feature

pathophysiology
disease severity
respiratory tract disease: DM, disease management
respiratory tract disease: DT, drug therapy
morbidity
mortality
disease predisposition
 respiratory tract infection
Europe
practice guideline
medical information
clinical trial
drug mechanism
long term care
disease exacerbation
cost effectiveness analysis
lung function
hospital admission
drug structure
drug metabolism
side effect: SI, side effect
human
nonhuman
male
animal experiment
animal model
controlled study
aged
review
Drug Descriptors:
*mucolytic agent: AE, adverse drug reaction
*mucolytic agent: CB, drug combination
*mucolytic agent: CM, drug comparison
*mucolytic agent: DV, drug development
*mucolytic agent: DT, drug therapy
*mucolytic agent: PE, pharmacoeconomics
*mucolytic agent: PK, pharmacokinetics
*mucolytic agent: PD, pharmacology
*mucolytic agent: IV, intravenous drug administration
*mucolytic agent: PO, oral drug administration
*expectorant agent: AE, adverse drug reaction
*expectorant agent: AD, drug administration
*expectorant agent: CB, drug combination
*expectorant agent: CM, drug comparison
*expectorant agent: DV, drug development
*expectorant agent: DT, drug therapy
*expectorant agent: PE, pharmacoeconomics
*expectorant agent: PK, pharmacokinetics
*expectorant agent: PD, pharmacology
*expectorant agent: IH, inhalational drug administration
*expectorant agent: PO, oral drug administration
acetylcysteine: AE, adverse drug reaction
acetylcysteine: AD, drug administration
acetylcysteine: AN, drug analysis
acetylcysteine: CM, drug comparison
acetylcysteine: DT, drug therapy
acetylcysteine: PK, pharmacokinetics
acetylcysteine: PD, pharmacology
acetylcysteine: IH, inhalational drug administration
acetylcysteine: PO, oral drug administration
nacistelyn: CM, drug comparison
nacistelyn: DT, drug therapy
nacistelyn: PD, pharmacology

nacystelyn: IH, inhalational drug administration
acetylcysteine derivative: CM, drug comparison
acetylcysteine derivative: DT, drug therapy
acetylcysteine derivative: PD, pharmacology
acetylcysteine derivative: IH, inhalational drug administration
mecysteine: AE, adverse drug reaction
mecysteine: CM, drug comparison
mecysteine: DT, drug therapy
mecysteine: PD, pharmacology
mesna: AE, adverse drug reaction
mesna: CM, drug comparison
mesna: DT, drug therapy
mesna: PD, pharmacology
carbocisteine: AE, adverse drug reaction
carbocisteine: CM, drug comparison
carbocisteine: DT, drug therapy
carbocisteine: PD, pharmacology
carbocisteine lys: AE, adverse drug reaction
carbocisteine lys: CM, drug comparison
carbocisteine lys: DT, drug therapy
carbocisteine lys: PK, pharmacokinetics
carbocisteine lys: PD, pharmacology
carbocisteine lys: PO, oral drug administration
erdosteine: AE, adverse drug reaction
erdosteine: AN, drug analysis
erdosteine: CM, drug comparison
erdosteine: DT, drug therapy
erdosteine: PD, pharmacology
stepronin: AN, drug analysis
stepronin: CM, drug comparison
stepronin: DT, drug therapy
stepronin: PD, pharmacology
ambroxol: AN, drug analysis
ambroxol: CB, drug combination
ambroxol: CM, drug comparison
ambroxol: DT, drug therapy
ambroxol: PD, pharmacology
bromhexine: AN, drug analysis
bromhexine: CB, drug combination
bromhexine: CM, drug comparison
bromhexine: DT, drug therapy
bromhexine: PD, pharmacology
bromhexine: PO, oral drug administration
iodinated glycerol: AE, adverse drug reaction
iodinated glycerol: AN, drug analysis
iodinated glycerol: CM, drug comparison
iodinated glycerol: DT, drug therapy
iodinated glycerol: PD, pharmacology
clenbuterol: CM, drug comparison
clenbuterol: DT, drug therapy
clenbuterol: PD, pharmacology
ofloxacin: CB, drug combination
ofloxacin: DT, drug therapy
ofloxacin: PK, pharmacokinetics
amoxicillin: CB, drug combination
amoxicillin: DT, drug therapy
amoxicillin: PK, pharmacokinetics
erythromycin: CB, drug combination
erythromycin: DT, drug therapy
erythromycin: PK, pharmacokinetics
dornase alfa: CM, drug comparison
dornase alfa: DV, drug development

dornase alfa: DT, drug therapy
dornase alfa: PD, pharmacology
dornase alfa: IH, inhalational drug administration
gelsolin: DT, drug therapy
gelsolin: PD, pharmacology
eprazinon: CM, drug comparison
eprazinon: DT, drug therapy
guaifenesin: DT, drug therapy
guaifenesin: PD, pharmacology
letosteine: CM, drug comparison
letosteine: DT, drug therapy
tiopronin: CM, drug comparison
tiopronin: DT, drug therapy
s ethylcysteine: CM, drug comparison
s ethylcysteine: DT, drug therapy
unclassified drug

CAS REGISTRY NO.:

(acetylcysteine) 616-91-1; (mecysteine) 18598-63-5,
2485-62-3; (mesna) 19767-45-4, 3375-50-6; (carbocysteine)
638-23-3; (erdosteine) 84611-23-4; (stepronin)
72324-18-6; (ambroxol) 18683-91-5, 23828-92-4; (bromhexine)
3572-43-8, 611-75-6; (iodinated glycerol) 5634-39-9;
(clenbuterol) 21898-19-1, 37148-27-9; (ofloxacin)
82419-36-1; (amoxicillin) 26787-78-0, 34642-77-8,
61336-70-7; (erythromycin) 114-07-8, 70536-18-4; (dornase
alfa) 143831-71-4; (guaifenesin) 93-14-1; (letosteine)
53943-88-7; (tiopronin) 1953-02-2; (s ethylcysteine)
2139-90-4, 2629-59-6

L41 ANSWER 45 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

ACCESSION NUMBER:

2001121355 EMBASE

TITLE:

Management of acute exacerbations of chronic obstructive
pulmonary disease: A summary and appraisal of published
evidence.

AUTHOR:

Bach P.B.; Brown C.; Gelfand S.E.; McCrory D.C.

CORPORATE SOURCE:

Dr. P.B. Bach, Health Outcomes Research Group, Memorial
Sloan-Kettering Can. Center, Box 221, 1275 York Avenue, New
York, NY 10021, United States

SOURCE:

Annals of Internal Medicine, (3 Apr 2001) 134/7 (600-620).

Refs: 129

ISSN: 0003-4819 CODEN: AIMEAS

COUNTRY:

United States

DOCUMENT TYPE:

Journal; General Review

FILE SEGMENT:

006 Internal Medicine

015 Chest Diseases, Thoracic Surgery and Tuberculosis

037 Drug Literature Index

LANGUAGE:

English

SUMMARY LANGUAGE:

English

ABSTRACT:

Purpose: To review critically the available data on diagnostic evaluation, risk stratification, and therapeutic management of patients with acute exacerbations of chronic obstructive pulmonary disease (COPD). Data Sources: English-language articles were identified by searching MEDLINE (1966 to 2000, week 5), EMBASE (1974 to 2000, week 18), HealthStar (1975 to June 2000), and the Cochrane Controlled Trials Register (2000, Issue 1). Study Selection: The best available evidence on each subtopic was selected for analysis. Randomized trials, sometimes buttressed by cohort studies, were used to evaluate therapeutic interventions. Cohort studies were used to evaluate diagnostic tests and risk stratification. Data Extraction: Study design and results were summarized in evidence tables. Individual studies were rated by internal validity, external validity, and quality of design. Statistical analyses of combined data were not performed. Data Synthesis: Data on the utility of most diagnostic tests are limited. However, chest radiography and arterial blood gas sampling seem useful while acute spirometry does not. Identifiable clinical variables are associated

with risk for relapse and risk for death after hospitalization for an acute exacerbation. Evidence of efficacy was found for bronchodilators, corticosteroids, and noninvasive positive-pressure ventilation. There is also support for the use of antibiotics in patients with more severe exacerbations. On the basis of limited data, mucolytics and chest physiotherapy do not seem to be of benefit, and oxygen supplementation seems to increase the risk for respiratory failure only in an identifiable subgroup of patients. Conclusions: Although suggestions for appropriate management can be made on the basis of available evidence, the supporting literature is scarce and further high-quality research is necessary. Such research will require an improved, generally acceptable, and transportable definition of acute exacerbation of COPD, as well as improved methods for observing and measuring outcomes.

CONTROLLED TERM:

Medical Descriptors:

- *chronic obstructive lung disease: DI, diagnosis
- *chronic obstructive lung disease: DT, drug therapy
- *chronic obstructive lung disease: TH, therapy
- *disease exacerbation
- thorax radiography
- arterial gas
- spirometry
- relapse
- mortality
- hospitalization
- drug efficacy
- positive end expiratory pressure
- antibiotic therapy
- physiotherapy
- oxygen therapy
- forced expiratory volume
- respiratory tract infection**
- human
- clinical trial
- review
- priority journal

Drug Descriptors:

- *bronchodilating agent: CT, clinical trial
- *bronchodilating agent: DT, drug therapy
- *corticosteroid: CT, clinical trial
- *corticosteroid: DT, drug therapy
- *antibiotic agent: CT, clinical trial
- *antibiotic agent: DT, drug therapy
- *mucolytic agent: CT, clinical trial
- *mucolytic agent: DT, drug therapy
- hydrocortisone: CT, clinical trial
- hydrocortisone: DT, drug therapy
- hydrocortisone: IV, intravenous drug administration
- prednisolone: CT, clinical trial
- prednisolone: DT, drug therapy
- prednisolone: PO, oral drug administration
- prednisone: CT, clinical trial
- prednisone: DT, drug therapy
- prednisone: PO, oral drug administration
- methylprednisolone: CT, clinical trial
- methylprednisolone: DT, drug therapy
- methylprednisolone: IV, intravenous drug administration
- amoxicillin: CT, clinical trial
- amoxicillin: DT, drug therapy
- cotrimoxazole: CT, clinical trial
- cotrimoxazole: DT, drug therapy
- chloramphenicol: CT, clinical trial
- chloramphenicol: DT, drug therapy
- doxycycline: CT, clinical trial

doxycycline: DT, drug therapy
tetracycline: CT, clinical trial
tetracycline: DT, drug therapy
penicillin G: CT, clinical trial
penicillin G: CB, drug combination
penicillin G: DT, drug therapy
streptomycin: CT, clinical trial
streptomycin: CB, drug combination
streptomycin: DT, drug therapy
ampicillin: CT, clinical trial
ampicillin: DT, drug therapy
oxytetracycline: CT, clinical trial
oxytetracycline: DT, drug therapy
domiodol: CT, clinical trial
domiodol: DT, drug therapy
bromhexine: CT, clinical trial
bromhexine: DT, drug therapy
ambroxol: CT, clinical trial
ambroxol: DT, drug therapy
carbocysteine: CT, clinical trial
carbocysteine: DT, drug therapy
beta adrenergic receptor stimulating agent: CT, clinical trial
beta adrenergic receptor stimulating agent: DT, drug therapy
cholinergic receptor blocking agent: CT, clinical trial
cholinergic receptor blocking agent: DT, drug therapy
(hydrocortisone) 50-23-7; (prednisolone) 50-24-8;
(prednisone) 53-03-2; (methylprednisolone) 6923-42-8,
83-43-2; (amoxicillin) 26787-78-0, 34642-77-8, 61336-70-7;
(cotrimoxazole) 8064-90-2; (chloramphenicol) 134-90-7,
2787-09-9, 56-75-7; (doxycycline) 10592-13-9, 17086-28-1,
564-25-0; (tetracycline) 23843-90-5, 60-54-8, 64-75-5;
(penicillin G) 1406-05-9, 61-33-6; (streptomycin) 57-92-1;
(ampicillin) 69-52-3, 69-53-4, 7177-48-2, 74083-13-9,
94586-58-0; (oxytetracycline) 2058-46-0, 56761-42-3,
79-57-2; (domiodol) 61869-07-6; (bromhexine) 3572-43-8,
611-75-6; (ambroxol) 18683-91-5, 23828-92-4;
(carbocysteine) **638-23-3**

CAS REGISTRY NO.:

L41 ANSWER 46 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 2001338797 EMBASE
TITLE: Inexplicable suppression of hepatic uptake of gallium-67, a
case report.
AUTHOR: Nakahara T.; Fujii H.; Nakamura K.; Hashimoto J.; Kubo A.
CORPORATE SOURCE: Dr. T. Nakahara, Department of Radiology, Keio University
School of Medicine, 35 Shinano-machi, Shinjuku-ku, Tokyo
160-8582, Japan. n-tadaki@snu.ne.jp
SOURCE: Annals of Nuclear Medicine, (2001) 15/4 (377-379).
Refs: 13
ISSN: 0914-7187 CODEN: ANMEEX
COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 023 Nuclear Medicine
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
ABSTRACT:

We describe here a case report of a patient with acute lymphocytic leukemia in whom hepatic gallium-67 (Ga-67) uptake was suppressed. The patient was hospitalized with increasing dyspnea. In Ga-67 scintigraphy, there was no hepatic uptake, although other physiological uptake was clearly observed. In addition, the scintigraphy showed increased accumulation in the right lung

consistent with infection. We considered possible reasons for these findings. The patient had no history of chemotherapy or blood transfusion, and his iron metabolism was almost normal. He was not receiving any medication which might reduce hepatic blood flow. Blood chemistry suggested normal hepatic and renal function. The patient died from pneumonia 6 weeks later. The autopsy revealed extensive infiltration of the right lung with *Bacillus cereus* (*B. cereus*). Metabolic acidosis and/or iron utilization of *B. cereus* may induce both increased Ga-67 accumulation in the infected lesion and suppressed uptake in the liver, but these mechanisms could not explain normal physiological uptake in the other organs. This case warranted the further study of the hepatic Ga67 uptake mechanism.

CONTROLLED TERM: Medical Descriptors:
*liver blood flow
*scintigraphy
acute lymphocytic leukemia: DI, diagnosis
acute lymphocytic leukemia: DT, drug therapy
 bacterial pneumonia: CO, complication
 bacterial pneumonia: DT, drug therapy
Bacillus cereus
liver metabolism
drug uptake
metabolic acidosis
human
male
case report
aged
article
priority journal
Drug Descriptors:
*gallium 67: PK, pharmacokinetics
pilsicainide
digoxin
acetylsalicylic acid
rebamipide
oxetacaine
cefcapene pivoxil
carbocysteine
tiaprofenic acid
antibiotic agent: DT, drug therapy
CAS REGISTRY NO.: (gallium 67) 14119-09-6; (pilsicainide) 88069-49-2;
(digoxin) 20830-75-5, 57285-89-9; (acetylsalicylic acid)
493-53-8, 50-78-2, 53663-74-4, 53664-49-6, 63781-77-1;
(rebamipide) 111911-87-6; (oxetacaine) 126-27-2,
78371-69-4, 8059-92-5; (cefcapene pivoxil) 105889-45-0;
(carbocysteine) ~~638-23-3~~; (tiaprofenic acid)
33005-95-7
L41 ANSWER 47 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 2001406622 EMBASE
TITLE: Managing stable chronic obstructive pulmonary disease.
SOURCE: Drug and Therapeutics Bulletin, (2001) 39/11 (81-85).
Refs: 57
ISSN: 0012-6543 CODEN: DRTBAE
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis
019 Rehabilitation and Physical Medicine
030 Pharmacology
037 Drug Literature Index
038 Adverse Reactions Titles
039 Pharmacy
LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT:

Over 26,000 people died of chronic obstructive pulmonary disease (COPD) in England and Wales in 1999. The disease is a common cause of consultations in primary care and accounts for as many as 1 in 8 medical admissions. Patients with stable COPD, the focus of this article, experience chronic symptoms such as breathlessness, cough, sputum production, wheeze and chest tightness, which worsen slowly over time. We do not deal here with the management of severe acute exacerbations, which are caused by an additional (often infective) process.

CONTROLLED TERM:

Medical Descriptors:

- *chronic obstructive lung disease: DI, diagnosis
- *chronic obstructive lung disease: DT, drug therapy
- *chronic obstructive lung disease: RH, rehabilitation
- *chronic obstructive lung disease: SU, surgery
- *chronic obstructive lung disease: TH, therapy
- patient care
- mortality
- United Kingdom
- consultation
- primary medical care
- hospital admission
- symptom
- dyspnea
- coughing
- sputum
- wheezing
- thorax pain
- disease severity
- acute disease
- disease exacerbation
- lung infection: DT, drug therapy
- spirometry
- oxygen therapy
- medical nebulizer
- smoking cessation
- substitution therapy
- side effect: SI, side effect
- drug blood level
- metered dose inhaler
- dry powder
- drug delivery system
- nebulization
- rehabilitation
- ambulatory care
- lung surgery
- lung transplantation
- travel
- human
- clinical trial
- randomized controlled trial
- controlled study
- article
- Drug Descriptors:
- *oxygen: CT, clinical trial
- *oxygen: DT, drug therapy
- nicotine: DT, drug therapy
- amfebutamone: DT, drug therapy
- bronchodilating agent: DT, drug therapy
- beta adrenergic receptor stimulating agent: CB, drug combination
- beta adrenergic receptor stimulating agent: DT, drug

therapy
beta adrenergic receptor stimulating agent: PD,
pharmacology
muscarinic receptor blocking agent: CB, drug combination
muscarinic receptor blocking agent: DO, drug dose
muscarinic receptor blocking agent: DT, drug therapy
muscarinic receptor blocking agent: PR, pharmaceuticals
muscarinic receptor blocking agent: PD, pharmacology
muscarinic receptor blocking agent: IH, inhalational drug
administration
theophylline: AE, adverse drug reaction
theophylline: CB, drug combination
theophylline: CR, drug concentration
theophylline: DO, drug dose
theophylline: IT, drug interaction
theophylline: DT, drug therapy
theophylline: PR, pharmaceuticals
theophylline: PK, pharmacokinetics
theophylline: PD, pharmacology
theophylline: PO, oral drug administration
salbutamol: CT, clinical trial
salbutamol: CM, drug comparison
salbutamol: DO, drug dose
salbutamol: DT, drug therapy
salbutamol: PR, pharmaceuticals
salbutamol: PD, pharmacology
salbutamol: IH, inhalational drug administration
terbutaline: CT, clinical trial
terbutaline: CM, drug comparison
terbutaline: DO, drug dose
terbutaline: DT, drug therapy
terbutaline: PR, pharmaceuticals
terbutaline: PD, pharmacology
terbutaline: IH, inhalational drug administration
placebo
ipratropium bromide: DO, drug dose
ipratropium bromide: DT, drug therapy
ipratropium bromide: PR, pharmaceuticals
ipratropium bromide: PD, pharmacology
ipratropium bromide: IH, inhalational drug administration
oxitropium bromide: DO, drug dose
oxitropium bromide: DT, drug therapy
oxitropium bromide: PR, pharmaceuticals
oxitropium bromide: PD, pharmacology
oxitropium bromide: IH, inhalational drug administration
salmeterol: CT, clinical trial
salmeterol: CM, drug comparison
salmeterol: DO, drug dose
salmeterol: DT, drug therapy
salmeterol: PR, pharmaceuticals
salmeterol: PD, pharmacology
salmeterol: IH, inhalational drug administration
formoterol: CT, clinical trial
formoterol: CM, drug comparison
formoterol: DO, drug dose
formoterol: DT, drug therapy
formoterol: PR, pharmaceuticals
formoterol: PD, pharmacology
formoterol: IH, inhalational drug administration
macrolide: IT, drug interaction
macrolide: PD, pharmacology
quinolone: IT, drug interaction
quinolone: PD, pharmacology

corticosteroid: CT, clinical trial
corticosteroid: DO, drug dose
corticosteroid: DT, drug therapy
corticosteroid: PR, pharmaceuticals
corticosteroid: PD, pharmacology
corticosteroid: IH, inhalational drug administration
corticosteroid: PO, oral drug administration
fluticasone: CT, clinical trial
fluticasone: DO, drug dose
fluticasone: DT, drug therapy
fluticasone: PR, pharmaceuticals
fluticasone: PD, pharmacology
fluticasone: IH, inhalational drug administration
fluticasone: PO, oral drug administration
budesonide: CT, clinical trial
budesonide: DO, drug dose
budesonide: DT, drug therapy
budesonide: PR, pharmaceuticals
budesonide: PD, pharmacology
budesonide: IH, inhalational drug administration
budesonide: PO, oral drug administration
mucolytic agent: CT, clinical trial
mucolytic agent: DT, drug therapy
mucolytic agent: PD, pharmacology
mucolytic agent: PO, oral drug administration
carbocysteine: CT, clinical trial
carbocysteine: DT, drug therapy
carbocysteine: PD, pharmacology
carbocysteine: PO, oral drug administration
influenza vaccine: DT, drug therapy
Pneumococcus polysaccharide: DT, drug therapy
antibiotic agent: DT, drug therapy
(oxygen) 7782-44-7; (nicotine) 54-11-5; (amfebutamone)
31677-93-7, 34911-55-2; (theophylline) 58-55-9, 5967-84-0,
8055-07-0, 8061-56-1, 99007-19-9; (salbutamol) 18559-94-9;
(terbutaline) 23031-25-6; (ipratropium bromide) 22254-24-6;
(oxitropium bromide) 30286-75-0; (salmeterol) 89365-50-4;
(formoterol) 73573-87-2; (fluticasone) 90566-53-3;
(budesonide) 51333-22-3; (carbocysteine) 638-23-3

CAS REGISTRY NO.:

L41 ANSWER 48 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 2001182000 EMBASE
TITLE: Protocols for minor ailments of the TESEMED project: Cough.
AUTHOR: Cordero L.; Fernandez-Llimos F.; Cadavid M.I.; Giorgio F.;
Loza M.I.
CORPORATE SOURCE: Dr. M.I. Loza, Departament of Farmacologia, Facultade of
Farmacia, Universidade de Santiago, 15782 Santiago de
Campostela, Spain. ffmabel@usc.es
SOURCE: Pharmaceutical Care Espana, (2001) 3/2 (77-92).
Refs: 34
ISSN: 1139-6202 CODEN: PCEACX
COUNTRY: Spain
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 006 Internal Medicine
015 Chest Diseases, Thoracic Surgery and Tuberculosis
017 Public Health, Social Medicine and Epidemiology
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
CONTROLLED TERM: Medical Descriptors:
*clinical protocol
*coughing: DT, drug therapy

*coughing: ET, etiology
health care system
pharmacist
Europe
public health
self medication
 respiratory tract infection
symptomatology
disease classification
patient referral
vertigo: SI, side effect
constipation: SI, side effect
photosensitivity: SI, side effect
asthma: DT, drug therapy
chronic obstructive lung disease: DT, drug therapy
human
male
female
controlled study
aged
child
adult
article
Drug Descriptors:
mucolytic agent: DT, drug therapy
expectorant agent: DT, drug therapy
opiate derivative: DT, drug therapy
antihistaminic agent: AE, adverse drug reaction
antihistaminic agent: DT, drug therapy
acetylcysteine: DT, drug therapy
carbocysteine: DT, drug therapy
letosteine: DT, drug therapy
mesna: DT, drug therapy
citiolone: DT, drug therapy
bromhexine: DT, drug therapy
ambroxol: DT, drug therapy
guaifenesin: DT, drug therapy
potassium iodide: EC, endogenous compound
benzoic acid: DT, drug therapy
sodium iodide: DT, drug therapy
corticosteroid: DT, drug therapy
corticosteroid: IH, inhalational drug administration
corticosteroid: PO, oral drug administration
beclometasone: DT, drug therapy
beclometasone: IH, inhalational drug administration
beclometasone: PO, oral drug administration
betamethasone: DT, drug therapy
betamethasone: IH, inhalational drug administration
betamethasone: PO, oral drug administration
budesonide: DT, drug therapy
budesonide: IH, inhalational drug administration
budesonide: PO, oral drug administration
flunisolide: DT, drug therapy
flunisolide: IH, inhalational drug administration
flunisolide: PO, oral drug administration
fluticasone: DT, drug therapy
fluticasone: IH, inhalational drug administration
fluticasone: PO, oral drug administration
prednisolone: DT, drug therapy
prednisolone: IH, inhalational drug administration
prednisolone: PO, oral drug administration
prednisone: DT, drug therapy
prednisone: IH, inhalational drug administration

prednisone: PO, oral drug administration
triamcinolone: DT, drug therapy
triamcinolone: IH, inhalational drug administration
triamcinolone: PO, oral drug administration
leukotriene receptor blocking agent: DT, drug therapy
montelukast: DT, drug therapy
pranlukast: DT, drug therapy
verlukast: DT, drug therapy
zafirlukast: DT, drug therapy
unindexed drug

CAS REGISTRY NO.:

(acetylcysteine) 616-91-1; (carbocysteine) 638-23-3;
; (letosteine) 53943-88-7; (mesna) 19767-45-4, 3375-50-6;
(citolone) 1195-16-0; (bromhexine) 3572-43-8, 611-75-6;
(ambroxol) 18683-91-5, 23828-92-4; (guaifenesin) 93-14-1;
(potassium iodide) 7681-11-0; (benzoic acid) 532-32-1,
582-25-2, 65-85-0, 766-76-7; (sodium iodide) 7681-82-5;
(beclometasone) 4419-39-0; (betamethasone) 378-44-9;
(budesonide) 51333-22-3; (flunisolide) 3385-03-3;
(fluticasone) 90566-53-3; (prednisolone) 50-24-8;
(prednisone) 53-03-2; (triamcinolone) 124-94-7;
(montelukast) 151767-02-1, 158966-92-8; (pranlukast)
103177-37-3; (verlukast) 115104-28-4; (zafirlukast)
107753-78-6

L41 ANSWER 49 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

ACCESSION NUMBER: 97195738 EMBASE

DOCUMENT NUMBER: 1997195738

TITLE: [The use of carbocysteine-sobrerol in the prophylaxis of
infections episodes in post tracheostomy patients].
STUDIO DELL'ASSOCIAZIONE CARBOCISTEINA-SOBREROLO NELLA
PREVENZIONE DELLE INFEZIONI POST-CHIRURGICHE DI PAZIENTI
TRACHEOTOMIZZATI.

AUTHOR: Goumas P.; Charbis E.; Naxakis S.; Spyropoulos K.
CORPORATE SOURCE: Prof. P. Goumas, Pharmanel Pharmaceuticals, 106, Marathonos
Av., 15344 Gerakas, Attiki, Greece

SOURCE: Rivista Italiana di Otorinolaringologia Audiologia e
Foniatria, (1997) 17/1 (47-51).

Refs: 17

ISSN: 0392-1360 CODEN: RIOFDR

COUNTRY: Italy

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 004 Microbiology
011 Otorhinolaryngology
015 Chest Diseases, Thoracic Surgery and Tuberculosis
030 Pharmacology
037 Drug Literature Index

LANGUAGE: Italian

SUMMARY LANGUAGE: English; Italian

ABSTRACT:

Twenty-eight patients tracheostomized because of different aetiologies, were studied. In 15 patients carbocysteine-sobrerol (C-S) was used for a period of 3 months versus untreated patients. In 13 patients no mucolytics was used. The positive and long-lasting changes of the mucus quality and quantity and the amelioration of the patient's clinical status, indicate the use of this substance. The decrease of respiratory infections frequency, compared to the patient's group that did not use the (C-S), the very good tolerability of this substance during the study period make it a valid therapy and means for the prevention of different problems, such as infections, possibly developed from tracheostomy patients.

CONTROLLED TERM: Medical Descriptors:

*respiratory tract infection: EP, epidemiology

*respiratory tract infection: CO, complication

*respiratory tract infection: DT, drug therapy
*respiratory tract infection: PC, prevention
*tracheostomy
adult
article
clinical article
clinical trial
controlled study
drug efficacy
female
human
male
Drug Descriptors:
*carbocisteine: DT, drug therapy
*carbocisteine: CB, drug combination
*sobrerol: DT, drug therapy
*sobrerol: CB, drug combination
clindamycin: DT, drug therapy
CAS REGISTRY NO.: (carbocisteine) 638-23-3; (sobrerol) 498-71-5;
(clindamycin) 18323-44-9

L41 ANSWER 50 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 96308225 EMBASE
DOCUMENT NUMBER: 1996308225
TITLE: [Treatment of chronic rhinosinusitis].
TRATAMIENTO DE LA RINOSINUSITIS CRONICA.
AUTHOR: Galindo De Jaime G.
CORPORATE SOURCE: Hospital Universitario, Facultad de Medicina, Universidad
Autonoma, Avenida Madero y Gonzalitos, Nuevo Leon, C.P.
66960, Mexico
SOURCE: Revista Alergia Mexico, (1996) 43/SPEC. ISS. (19-21).
ISSN: 0002-5151 CODEN: ALEGA
COUNTRY: Mexico
DOCUMENT TYPE: Journal; (Short Survey)
FILE SEGMENT: 011 Otorhinolaryngology
037 Drug Literature Index
LANGUAGE: Spanish
SUMMARY LANGUAGE: Spanish; English
ABSTRACT:
The prevalence of patients with chronic rhinosinusitis seeking medical
attention by the primary care practitioner, pediatrician, and allergist demands
an understanding of aspects involved in its treatment particularly the use of
antibiotics to relieve the symptoms.
CONTROLLED TERM: Medical Descriptors:
*chronic rhinitis: DT, drug therapy
*chronic sinusitis: DT, drug therapy
drug choice
drug efficacy
human
intranasal drug administration
short survey
Drug Descriptors:
*antibiotic agent: DT, drug therapy
*antihistaminic agent: DT, drug therapy
*corticosteroid: DT, drug therapy
*decongestive agent: DT, drug therapy
*mucolytic agent: DT, drug therapy
alin
ambroxol: DT, drug therapy
amoxicillin: DT, drug therapy
amoxicillin plus clavulanic acid: DT, drug therapy
beclometasone: DT, drug therapy

beclometasone dipropionate
budesonide: DT, drug therapy
carbocisteine: DT, drug therapy
cefaclor: DT, drug therapy
cotrimoxazole: DT, drug therapy
dexamethasone: DT, drug therapy
erythromycin: DT, drug therapy
fluocinolone: DT, drug therapy
fluocinolone acetonide
fluticasone: DT, drug therapy
fluticasone propionate
guaifenesin: DT, drug therapy
naphazoline: DT, drug therapy
oxymetazoline: DT, drug therapy
phenylephrine: DT, drug therapy
sodium chloride: DT, drug therapy
triamcinolone: DT, drug therapy
triamcinolone acetonide
unclassified drug

CAS REGISTRY NO.:

(ambroxol) 18683-91-5, 23828-92-4; (amoxicillin)
26787-78-0, 61336-70-7; (amoxicillin plus clavulanic acid)
74469-00-4; (beclometasone) 4419-39-0; (beclometasone
dipropionate) 5534-09-8; (budesonide) 51333-22-3;
(carbocisteine) 638-23-3; (cefaclor) 53994-73-3;
(cotrimoxazole) 8064-90-2; (dexamethasone) 50-02-2;
(erythromycin) 114-07-8, 70536-18-4; (fluocinolone)
807-38-5; (fluocinolone acetonide) 67-73-2; (fluticasone)
90566-53-3; (fluticasone propionate) 80474-14-2;
(guaifenesin) 93-14-1; (naphazoline) 5144-52-5, 550-99-2,
835-31-4; (oxymetazoline) 1491-59-4, 2315-02-8;
(phenylephrine) 532-38-7, 59-42-7, 61-76-7; (sodium
chloride) 7647-14-5; (triamcinolone) 124-94-7;
(triamcinolone acetonide) 76-25-5

CHEMICAL NAME:

Beconase; Synalar; Alin; Nasacort; Flonase; Rhinocort

L41 ANSWER 51 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

ACCESSION NUMBER: 93349363 EMBASE

DOCUMENT NUMBER: 1993349363

TITLE: [Pertussis in childhood].
HUSTEN IM KINDESALTER.

AUTHOR: Seidenberg J.

CORPORATE SOURCE: Kinderklinik, Medizinische Hochschule, Konstanty-Gutschow-
Strasse 8, D-30625 Hannover, Germany

SOURCE: Monatsschrift fur Kinderheilkunde, (1993) 141/11 (893-906).
ISSN: 0026-9298 CODEN: MOKIAY

COUNTRY: Germany

DOCUMENT TYPE: Journal; (Short Survey)

FILE SEGMENT: 004 Microbiology
007 Pediatrics and Pediatric Surgery
037 Drug Literature Index

LANGUAGE: German

CONTROLLED TERM: Medical Descriptors:
*coughing: DI, diagnosis
*coughing: ET, etiology
*coughing: DT, drug therapy
*pertussis
childhood
human
oral drug administration
priority journal
short survey
Drug Descriptors:

acetylcysteine: DT, drug therapy
ambroxol: DT, drug therapy
amoxicillin: DT, drug therapy
antitussive agent: DT, drug therapy
beta 2 adrenergic receptor stimulating agent: DT, drug therapy
bromhexine: DT, drug therapy
bronchodilating agent: DT, drug therapy
bronchodilating agent: CB, drug combination
carbocysteine: DT, drug therapy
clobutinol: DT, drug therapy
codeine: DT, drug therapy
corticosteroid: CB, drug combination
corticosteroid: DT, drug therapy
cotrimoxazole: DT, drug therapy
cromoglycate disodium: CB, drug combination
cromoglycate disodium: DT, drug therapy
dextromethorphan: DT, drug therapy
erythromycin: DT, drug therapy
ipecac: DT, drug therapy
ipratropium bromide: DT, drug therapy
noscapine: DT, drug therapy
nose drops: DT, drug therapy
pentoxyverine: DT, drug therapy
sodium chloride: DT, drug therapy
sodium iodate: DT, drug therapy
theophylline: DT, drug therapy

CAS REGISTRY NO.: (acetylcysteine) 616-91-1; (ambroxol) 18683-91-5,
23828-92-4; (amoxicillin) 26787-78-0, 61336-70-7;
(bromhexine) 3572-43-8, 611-75-6; (carbocysteine)
638-23-3; (clobutinol) 1215-83-4, 14860-49-2;
(codeine) 76-57-3; (cotrimoxazole) 8064-90-2; (cromoglycate
disodium) 15826-37-6, 16110-51-3, 93356-79-7, 93356-84-4;
(dextromethorphan) 125-69-9, 125-71-3; (erythromycin)
114-07-8, 70536-18-4; (ipecac) 8012-96-2; (ipratropium
bromide) 22254-24-6; (noscapine) 128-62-1; (pentoxyverine)
77-23-6; (sodium chloride) 7647-14-5; (sodium iodate)
7681-55-2; (theophylline) 58-55-9, 5967-84-0, 8055-07-0,
8061-56-1, 99007-19-9

L41 ANSWER 52 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 92309793 EMBASE
DOCUMENT NUMBER: 1992309793
TITLE: [Mucosal immunity following SCMC-lys administration in
tracheotomized patients].
IMMUNITA' LOCALE IN SEGUITO A TRATTAMENTO CON
S-CARBOSSI-METILCISTEINA SALE DI LISINA NEI SOGGETTI
TRACHEOTOMIZZATI.
AUTHOR: Carlevato M.T.; Battaglio S.; Galeazzi E.; Bussi M.
CORPORATE SOURCE: II Clinica ORL, Universita di Torino, Via Genova, 3,10126
Torino, Italy
SOURCE: Acta Otorhinolaryngologica Italica, (1992) 12/2 (127-134).
ISSN: 0392-100X CODEN: AOITDU
COUNTRY: Italy
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis
026 Immunology, Serology and Transplantation
030 Pharmacology
037 Drug Literature Index
LANGUAGE: Italian
SUMMARY LANGUAGE: English; Italian
CONTROLLED TERM: Medical Descriptors:

*immunomodulation
***respiratory tract infection**
*tracheostomy
article
bronchus mucosa
bronchus secretion
clinical article
female
human
male
nose mucosa
oral drug administration
Drug Descriptors:
*carbocysteine: PD, pharmacology
*immunoglobulin a: EC, endogenous compound
(carbocysteine) **638-23-3**

CAS REGISTRY NO.:

L41 ANSWER 53 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 91194293 EMBASE

DOCUMENT NUMBER: 1991194293

TITLE: [Anaphylactoid reaction after oral intake of
N-acetylcysteine].
REACCION ANAFILACTOIDE TRAS ADMINISTRACION ORAL DE
N-ACETILCISTEINA.

AUTHOR:

Chivato T.; Herrero T.; De Barrio M.; Tornero P.; San Juan
A.; Moral A.; Rubio M.

CORPORATE SOURCE:

Seccion de Alergia, Hospital General 'Gregorio Maranon',
Madrid, Spain

SOURCE:

Revista Espanola de Alergologia e Inmunologia Clinica,
(1991) 6/2 (125-129).

ISSN: 0214-1477 CODEN: REACEN

COUNTRY:

Spain

DOCUMENT TYPE:

Journal; Article.

FILE SEGMENT:

015 Chest Diseases, Thoracic Surgery and Tuberculosis
037 Drug Literature Index
038 Adverse Reactions Titles

LANGUAGE:

Spanish

SUMMARY LANGUAGE:

English

CONTROLLED TERM:

Medical Descriptors:

*allergy
*anaphylaxis: DT, drug therapy
*anaphylaxis: SI, side effect
adult
article
case report
female
human
oral drug administration
respiratory tract infection: DT, drug therapy
Drug Descriptors:
*acetylcysteine: CB, drug combination
*acetylcysteine: DT, drug therapy
*acetylcysteine: PD, pharmacology
*adrenalin: DT, drug therapy
*adrenalin: CB, drug combination
*carbocysteine: PD, pharmacology
*citalolone: PD, pharmacology
*dexchlorpheniramine: DT, drug therapy
*fenoterol: CB, drug combination
*fenoterol: DT, drug therapy
*hydrocortisone: DT, drug therapy
*hydrocortisone: CB, drug combination

amoxicillin: DT, drug therapy
amoxicillin: CB, drug combination
CAS REGISTRY NO.: (acetylcysteine) 616-91-1; (adrenalin) 51-43-4, 55-31-2,
6912-68-1; (carbocysteine) **638-23-3**; (citolone)
1195-16-0; (dexchlorpheniramine) 25523-97-1; (fenoterol)
13392-18-2, 1944-12-3; (hydrocortisone) 50-23-7;
(amoxicillin) 26787-78-0, 61336-70-7

L41 ANSWER 54 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 91055044 EMBASE
DOCUMENT NUMBER: 1991055044
TITLE: Catharral diseases: Normalization of mucociliary transport.
AUTHOR: Prudent A.
SOURCE: Gazette Medicale, (1991) 98/1 (44).
ISSN: 0760-758X CODEN: GAMEE8
COUNTRY: France
DOCUMENT TYPE: Journal; Note
FILE SEGMENT: 011 Otorhinolaryngology
037 Drug Literature Index
LANGUAGE: French

CONTROLLED TERM: Medical Descriptors:
*mucosa inflammation: DT, drug therapy
drug efficacy
human
note
otitis: DT, drug therapy
rhinitis: DT, drug therapy
rhinopharyngitis: DT, drug therapy
sinusitis: DT, drug therapy
Drug Descriptors:
*carbocysteine: DT, drug therapy
CAS REGISTRY NO.: (carbocysteine) **638-23-3**
CHEMICAL NAME: Rhinathiol

L41 ANSWER 55 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 90159262 EMBASE
DOCUMENT NUMBER: 1990159262
TITLE: [Carbocystein plus ampicillin in the management of
bronchial diseases of acute bacterial origin].
CARBOCISTEINA MAS AMPICILINA EN EL MANEJO DE PADECIMIENTOS
BRONQUIALES DE ORIGEN BACTERIANO AGUDO.
AUTHOR: Sanchez Martinez J.
CORPORATE SOURCE: Servicio de Neumologia y Terapia Intensiva, Hospital
General 'Dr. Manuel Gea Gonzalez', Mexico, D.F., Mexico
SOURCE: Investigacion Medica Internacional, (1990) 16/4 (200-207).
ISSN: 0185-2108 CODEN: IMEIDH
COUNTRY: Mexico
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
015 Chest Diseases, Thoracic Surgery and Tuberculosis
037 Drug Literature Index
LANGUAGE: Spanish
SUMMARY LANGUAGE: English

CONTROLLED TERM: Medical Descriptors:
*antibiotic sensitivity
*bacterial infection
***respiratory tract infection: DT, drug therapy**
adult
aged
drug mixture
drug tolerance

major clinical study

human

male

female

article

Drug Descriptors:

*ampicillin: DT, drug therapy

*ampicillin: CB, drug combination

*ampicillin: CM, drug comparison

*carbocisteine: DT, drug therapy

*carbocisteine: CB, drug combination

*carbocisteine: CM, drug comparison

mucolin

mucolin a

unclassified drug

CAS REGISTRY NO.: (ampicillin) 69-52-3, 69-53-4, 7177-48-2, 74083-13-9,
94586-58-0; (carbocisteine) ~~638-23-3~~
CHEMICAL NAME: (1) Mucolin; (2) Mucolin a
COMPANY NAME: (2) Bigaux

L41 ANSWER 56 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

ACCESSION NUMBER: 90134102 EMBASE

DOCUMENT NUMBER: 1990134102

TITLE: [The treatment of chronic obstructive lung disease with
carbocisteine plus prenoxidiazine].
CARBOCISTEINA-PRENOXIDIAZINE: EFFETTO SULLA CONCENTRAZIONE
DI ANTIBIOTIC NEL SECRETO BRONCHIALE IN PAZIENTI AFFETTI DA
BRONCOPNEUMOPATIE CRONICHE OSTRUTTIVE.

AUTHOR: Cogo R.; De Luca P.

SOURCE: Basi Razionali della Terapia, (1990) 20/2 (125-130).

ISSN: 0393-7569 CODEN: BRDPEQ

COUNTRY: Italy

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis
037 Drug Literature Index

LANGUAGE: Italian

CONTROLLED TERM: Medical Descriptors:

*chronic bronchitis

*chronic obstructive lung disease: DT, drug therapy

*lung infection: DT, drug therapy

adult

clinical article

human

male

female

article

Drug Descriptors:

*amoxicillin: DT, drug therapy

*amoxicillin: CB, drug combination

*carbocisteine: DT, drug therapy

*carbocisteine: CB, drug combination

*clavulanic acid: DT, drug therapy

*clavulanic acid: CB, drug combination

*prenoxdiazine: DT, drug therapy

*prenoxdiazine: CB, drug combination

unclassified drug

CAS REGISTRY NO.: (amoxicillin) 26787-78-0, 61336-70-7; (carbocisteine)
~~638-23-3~~; (clavulanic acid) 58001-44-8;
(prenoxdiazine) 982-43-4

L41 ANSWER 57 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 89270178 EMBASE

DOCUMENT NUMBER: 1989270178
TITLE: A double-blind trial comparing amoxycillin and amoxycillin + S-carboxy-methyl-cysteine in the treatment of bronchopulmonary diseases.
AUTHOR: Spada E.; Priolo U.; Staffa C.; Broccali G.; Gusmitta A.
CORPORATE SOURCE: Divisione Pneumologia, Servizio Ospedaliero di Conselice, U.S.L. 36, Lugo, Italy
SOURCE: Giornale Italiano della Malattie del Torace, (1989) 43/4 (306-313).
ISSN: 0017-0437 CODEN: GIMTB4
COUNTRY: Italy
DOCUMENT TYPE: Journal
FILE SEGMENT: 004 Microbiology
015 Chest Diseases, Thoracic Surgery and Tuberculosis
037 Drug Literature Index
LANGUAGE: Italian
SUMMARY LANGUAGE: English
CONTROLLED TERM: Medical Descriptors:
*respiratory tract infection: DT, drug therapy
adult
aged
controlled study
clinical article
human
oral drug administration
Drug Descriptors:
*immunoglobulin a
*amoxicillin: DT, drug therapy
*amoxicillin: CB, drug combination
*carbocisteine: DT, drug therapy
*carbocisteine: CB, drug combination
CAS REGISTRY NO.: (amoxicillin) 26787-78-0, 61336-70-7; (carbocisteine) 638-23-3

L41 ANSWER 58 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 87040449 EMBASE
DOCUMENT NUMBER: 1987040449
TITLE: Therapy of respiratory tract infections joined to hypersecretion: Criteria for the combined use of antibiotics and mucolytics.
AUTHOR: Fraschini F.; D'Orsi S.; Falchi M.; et al.
CORPORATE SOURCE: Department of Chemotherapy, Medical School, University of Milan, Milan, Italy
SOURCE: Current Therapeutic Research - Clinical and Experimental, (1986) 40/5 (941-948).
CODEN: CTCEA
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
015 Chest Diseases, Thoracic Surgery and Tuberculosis
004 Microbiology
030 Pharmacology
LANGUAGE: English
ABSTRACT: Acute bronchial infections and acute exacerbations of chronic bronchitis are usually treated with concomitant administration of antibiotics and mucolytics. This study evaluates the pharmacological and clinical aspects leading to the choice of drugs with antibacterial activity and those that modify mucous secretion. A review of the literature confirms the rational basis for combined use of antibiotics and drugs regulating mucous secretion and assesses the validity of the combination of amoxycillin and S-carboxymethylcysteine.

CONTROLLED TERM: Medical Descriptors:
*chronic bronchitis
*drug efficacy
*drug mixture
*drug potentiation
*mucus secretion
*pneumonia
*respiratory tract infection
review
priority journal
respiratory system
oral drug administration
human
therapy
clinical article
Drug Descriptors:
*amoxicillin
*antibiotic agent
*carbocisteine
*mucolytic agent
CAS REGISTRY NO.: (amoxicillin) 26787-78-0, 61336-70-7; (carbocisteine)
638-23-3

L41 ANSWER 59 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 85237988 EMBASE
DOCUMENT NUMBER: 1985237988
TITLE: [Carbocisteine in posttuberculous hypersecretive chronic
bronchopathies].
LA CARBOCISTEINA NELLE BRONCOPATIE CRONICHE IPERSECRETIVE
POST-TUBERCOLARI.
AUTHOR: Lauriello G.; Berra A.; Giella D.; et al.
CORPORATE SOURCE: Regiona Campania, U.S.L. n. 53, Presidio Ospedaliero G. Da
Procida, Ie Divisione di Pneumotisiologia, 84100 Salerno,
Italy
SOURCE: Minerva Pneumologica, (1985) 24/2 (119-124).
CODEN: MIPNBX
COUNTRY: Italy
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
015 Chest Diseases, Thoracic Surgery and Tuberculosis
030 Pharmacology
LANGUAGE: Italian

CONTROLLED TERM: Medical Descriptors:
*chronic bronchitis
*lung tuberculosis
*drug therapy
*sputum
therapy
oral drug administration
human
respiratory system
clinical article
Drug Descriptors:
*carbocisteine
*mucolytic agent
CAS REGISTRY NO.: (carbocisteine) 638-23-3
CHEMICAL NAME: Lisomucil
COMPANY NAME: Lirca synthelabo (Italy)

L41 ANSWER 60 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 84110950 EMBASE
DOCUMENT NUMBER: 1984110950

TITLE: Mucolytic agents in affections of the lower respiratory tract.
AUTHOR: Bleeker J.D.; Sluiter H.J.; Edens Th. E.
CORPORATE SOURCE: Netherlands
SOURCE: Geneesmiddelenbulletin, (1984) 18/3 (11-14).
CODEN: GNMBAI
COUNTRY: Netherlands
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: Dutch

CONTROLLED TERM: Medical Descriptors:
*adverse drug reaction
*rash
*gastrointestinal toxicity
*mucolysis
*nausea
*respiratory tract infection
*skin toxicity
intoxication
respiratory system
oral drug administration
short survey
human
Drug Descriptors:
*acetylcysteine
*bromhexine
*carbocisteine
*mesna
cephalosporin derivative
penicillin derivative
bendogen
unclassified drug
CAS REGISTRY NO.: (acetylcysteine) 616-91-1; (bromhexine) 3572-43-8,
611-75-6; (carbocisteine) ~~638-23-3~~; (mesna)
19767-45-4, 3375-50-6
CHEMICAL NAME: Fluimucil; Rhinathiol; Mucocil; Siroxyl; Mucomyst;
Solvopect; Mucopect; Pulmoclast; Bendogen; Mistabron;
Bisolvon; Bronchipect

L41 ANSWER 61 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 83013481 EMBASE
DOCUMENT NUMBER: 1983013481
TITLE: Mode of action of mucodyne.
SOURCE: Forum Series, Royal Society of Medicine, (1982) No. 5/-
(26-28).
CODEN: FSRMDZ
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
LANGUAGE: English

CONTROLLED TERM: Medical Descriptors:
*goblet cell
*respiratory tract infection
respiratory system
short survey
abstract report
therapy
Drug Descriptors:
*carbocisteine
CAS REGISTRY NO.: (carbocisteine) ~~638-23-3~~

CHEMICAL NAME: Mucodyne

L41 ANSWER 62 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 82053078 EMBASE
DOCUMENT NUMBER: 1982053078
TITLE: [Carbocysteine in chronic rhinosinus inflammation].
LA CARBOCISTEINA NELLA PATOLOGIA FLOGISTICA CRONICA
RINOSINUSALE.
AUTHOR: Catalano G.B.; Malannino N.; Serra A.
CORPORATE SOURCE: Clin. ORL, Univ. Studi, Catania, Italy
SOURCE: Otorinolaringologia, (1981) 31/3 (311-321).
CODEN: OTORD5
COUNTRY: Italy
DOCUMENT TYPE: Journal
FILE SEGMENT: 011 Otorhinolaryngology
037 Drug Literature Index
LANGUAGE: Italian
SUMMARY LANGUAGE: English

ABSTRACT:
In the treatment of chronic rhinosinus inflammation, drugs capable of modifying mucous secretion characteristics are of particular importance. Outstanding among these is carbocysteine, a derivative of cysteine with blocked thiolic group, which seems capable of fostering restoral of the biochemical balance of the various mucin complements, decongesting the situation by inhibition of plasma quinines and reduction of mucosa metaplasia. The double blind technique has been used to carry out a clinical investigation on the effectiveness and tolerance of carbocysteine in chronic rhinosinus inflammatory pathology, with due consideration for clinical and instrumental subjective and objective parameters. The results of the investigation, following statistical processing, confirmed the effectiveness of carbocysteine treatment in both adults and the young suffering from rhinitis or rhinosinusitis. In particular, a statistically significant increase was recorded in the nasal mucus IgA of treated patients after 15 and 30 days of treatment. The results obtained are discussed with special regard for the increase in IgA. This finding is of considerable interest from the speculative and therapeutic viewpoints.

CONTROLLED TERM: Medical Descriptors:
*chronic rhinitis
*chronic sinusitis
*mucus
*mucus secretion
*nose smear
double blind procedure
drug therapy
controlled study
therapy
major clinical study
respiratory system
drug comparison
Drug Descriptors:
*carbocysteine
*immunoglobulin a
*placebo

CAS REGISTRY NO.: (carbocysteine) 638-23-3

L41 ANSWER 63 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 80149040 EMBASE
DOCUMENT NUMBER: 1980149040
TITLE: [Treatment of acute bronchopulmonary infections].
TRAITEMENT DES INFECTIONS AIGUES BRONCHO-PULMONAIRES.
AUTHOR: Patte F.; Boita F.; Beauchant G.
CORPORATE SOURCE: Serv. Pneumol., CHR La Miletrie, 806021 Poitiers, France
SOURCE: Archives Medicales de l'Ouest, (1980) 12/1-2 (31-34).

COUNTRY: France
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
LANGUAGE: French

CONTROLLED TERM: Medical Descriptors:
*respiratory tract infection
asthma
lung tuberculosis
drug therapy
short survey
therapy
respiratory system
drug administration
Drug Descriptors:
*ampicillin
*beta adrenergic receptor stimulating agent
*bromelain
*bromhexine
*carbocysteine
*cotrimoxazole
*doxycycline
*erythromycin
*minocycline
*penicillin g
*theophylline
rhinatiol
unclassified drug

CAS REGISTRY NO.: (ampicillin) 69-52-3, 69-53-4, 7177-48-2, 74083-13-9,
94586-58-0; (bromelain) 37189-34-7, 9001-00-7; (bromhexine)
3572-43-8, 611-75-6; (carbocysteine) 638-23-3;
(cotrimoxazole) 8064-90-2; (doxycycline) 10592-13-9,
17086-28-1, 564-25-0; (erythromycin) 114-07-8, 70536-18-4;
(minocycline) 10118-90-8, 11006-27-2, 13614-98-7;
(penicillin g) 1406-05-9, 61-33-6; (theophylline) 58-55-9,
5967-84-0, 8055-07-0, 8061-56-1, 99007-19-9

CHEMICAL NAME: Bisolvon; Rhinatiol; Extranase; Bactrim

L41 ANSWER 64 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 80024497 EMBASE
DOCUMENT NUMBER: 1980024497
TITLE: [Diagnosis, differential diagnosis and treatment of
inflammatory affections of the respiratory tract].
DIAGNOSE, DIFFERENTIALDIAGNOSE UND THERAPIE DER
ENTZUNDLICHEN ATEMWEGSERKRANKUNGEN.

AUTHOR: Dierkesmann R.
CORPORATE SOURCE: Johann Wolfgang Goethe-Univ., Frankfurt, Germany
SOURCE: Internistische Praxis, (1979) 19/4 (601-609).
CODEN: INPXAJ

COUNTRY: Germany
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
015 Chest Diseases, Thoracic Surgery and Tuberculosis
006 Internal Medicine

LANGUAGE: German

ABSTRACT:
After a definition of bronchitis the different forms of bronchitis are
classified according to pathogenetic points of view. According to this
classification a diagnostic concept is worked out which allows for a
differentiation among the various forms, sufficiently at least to activate any
special investigations. The therapeutic possibilities in unspecific bronchitis
and exogen-allergic bronchial asthma are described.

CONTROLLED TERM: Medical Descriptors:
*bronchitis
*drug therapy
 *respiratory tract infection
microscopy
respiratory system
therapy
short survey
human cell
histology
Drug Descriptors:
*adrenalin
*beclometasone
*bromhexine
*acetylcysteine
*prednisone
*theophylline
carbocisteine
triamcinolone
beclometasone dipropionate
aminophylline
proxiphylline
methylprednisolone
terbutaline
ipratropium bromide
doxycycline

CAS REGISTRY NO.: (adrenalin) 51-43-4, 55-31-2, 6912-68-1; (beclometasone) 4419-39-0; (bromhexine) 3572-43-8, 611-75-6; (acetylcysteine) 616-91-1; (prednisone) 53-03-2; (theophylline) 58-55-9, 5967-84-0, 8055-07-0, 8061-56-1, 99007-19-9; (carbocisteine) 638-23-3; (triamcinolone) 124-94-7; (beclometasone dipropionate) 5534-09-8; (aminophylline) 317-34-0; (proxiphylline) 603-00-9; (methylprednisolone) 6923-42-8, 83-43-2; (terbutaline) 23031-25-6; (ipratropium bromide) 22254-24-6; (doxycycline) 10592-13-9, 17086-28-1, 564-25-0

CHEMICAL NAME: Transbronchin; Bisolvon; Volon; Viarox; Sanasthmyl; Euphyllin; Spantin; Solu decortin; Bricanyl; Atrovent; Vibramycin

L41 ANSWER 65 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 80025312 EMBASE
DOCUMENT NUMBER: 1980025312
TITLE: [Preparation and pharmaco-toxicological study of a new iodo derivative endowed with mucolytic activity].
PREPARAZIONE E STUDIO FARMACO-TOSSICOLOGICO DI UN NUOVO IODODERIVATO AD ATTIVITA MUCOLITICA.
AUTHOR: Cantarelli G.; Carissimi M.; Gentili P.; Ravenna F.
CORPORATE SOURCE: Lab. Ric. Maggioni Farmaceut. S.P.A., Milano, Italy
SOURCE: Farmaco, Edizione Pratica, (1979) 34/9 (393-416).
CODEN: FRPPAO
COUNTRY: Italy
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
LANGUAGE: Italian
SUMMARY LANGUAGE: English

CONTROLLED TERM: Medical Descriptors:
*drug synthesis
*mucolysis
 *respiratory tract infection
drug therapy

respiratory system
therapy
methodology
Drug Descriptors:
*carbocysteine
*domiodol
*iodinated glycerol

CAS REGISTRY NO.: (carbocysteine) 638-23-3; (domiodol) 61869-07-6;
(iodinated glycerol) 5634-39-9
CHEMICAL NAME: Mg 13608

L41 ANSWER 66 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 79145091 EMBASE
DOCUMENT NUMBER: 1979145091
TITLE: [Evaluation of the clinical use of the combination

prenoxidiazine S-carboxy-methyl-cysteine].
POSSIBILITA DI IMPIEGO CLINICO DELL'ASSOCIAZIONE
PRENOXIDIAZINA -S-CARBOSSIMETIL-CISTEINA.

AUTHOR: Alesina R.; Caliandro L.; Cerveri I.; Scala C.
CORPORATE SOURCE: Clin. Tisiol. Mal. Apparato Resp., Univ. Pavia, Italy
SOURCE: Giornale di Clinica Medica, (1979) 60/2 (136-154).
CODEN: GCMEAI
COUNTRY: Italy
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
LANGUAGE: Italian
SUMMARY LANGUAGE: English

CONTROLLED TERM: Medical Descriptors:
*bronchitis
*lung carcinoma
*lung tuberculosis
*prenoxdiazine
drug mixture
drug therapy
major clinical study
therapy

Drug Descriptors:
*carbocysteine

CAS REGISTRY NO.: (carbocysteine) 638-23-3

L41 ANSWER 67 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 74055631 EMBASE
DOCUMENT NUMBER: 1974055631
TITLE: [Treatment of bronchopulmonary suppurative conditions with

a combination of S carboxymethylcysteine and tetracycline].
TRATAMIENTO DE SUPURACIONES BRONCOPULMONARES CON UN
COMPUESTO DE S CARBOXIMETILCISTEINA Y TETRACICLINA.

AUTHOR: Silva N.
CORPORATE SOURCE: Cat. Tisiol., Pab. XXX, Univ. Nac. Hosp. 'F.J.Muniz',
Buenos Aires, Argentina
SOURCE: Prensa Medica Argentina, (1973) 60/19 (650-654).
CODEN: PMARAU

DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
015 Chest Diseases, Thoracic Surgery and Tuberculosis
007 Pediatrics and Pediatric Surgery
006 Internal Medicine

LANGUAGE: Spanish

ABSTRACT:

Forty seven patients suffering from various suppurative bronchopulmonary alterations were treated with an association of S carboxymethyl cysteine and tetracycline hydrochloride. A study of the patients demonstrated the efficacy

of the medication employed.

CONTROLLED TERM: Medical Descriptors:
*bronchiectasis
*bronchitis
*bronchopneumonia
*chemotherapy
*drug mixture
*infection
*lung abscess
*lung disease
*pneumonia
major clinical study
therapy
Drug Descriptors:
*carbocysteine
*tetracycline
CAS REGISTRY NO.: (carbocysteine) 638-23-3; (tetracycline)
23843-90-5, 60-54-8, 64-75-5

=> fil reg

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in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s 638-23-3 or 2387-59-9

1 638-23-3
(638-23-3/RN)

2 2387-59-9
(2387-59-9/RN)

L42

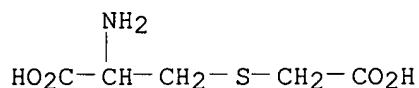
2 638-23-3 OR 2387-59-9

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L42 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN
RN 25390-17-4 REGISTRY
CN Cysteine, S-(carboxymethyl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Alanine, 3-[(carboxymethyl)thio]-, DL- (8CI)
CN DL-Cysteine, S-(carboxymethyl)-
OTHER NAMES:
CN 5-Amino-3-thiadihexanoic acid

CN DL-3-(Carboxymethylthio)alanine
CN S-(Carboxymethyl)-(RS)-cysteine
CN S-(Carboxymethyl)-DL-cysteine
CN S-(Carboxymethyl)cysteine
FS 3D CONCORD
DR ~~2387-59-9~~
MF C5 H9 N O4 S
CI COM
LC STN Files: ANABSTR, BEILSTEIN*, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS,
CASREACT, CHEMCATS, CHEMLIST, CSCHEM, IPA, MEDLINE, NIOSHTIC, RTECS*,
TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



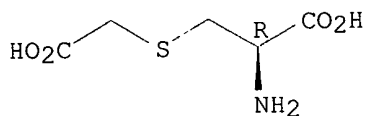
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

61 REFERENCES IN FILE CA (1947 TO DATE)
61 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L42 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN
RN ~~638-23-3~~ REGISTRY
CN L-Cysteine, S-(carboxymethyl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Alanine, 3-[(carboxymethyl)thio]-, L- (6CI, 8CI)
OTHER NAMES:
CN (L)-2-Amino-3-(carboxymethylthio)propionic acid
CN (R)-S-(Carboxymethyl)cysteine
CN 3-[(Carboxymethyl)thio]-L-alanine
CN AHR 3053
CN Bronchokod
CN Carbocysteine
CN Carbocit
CN Carbocysteine
CN DF 1794Y
CN L-(Carboxymethyl)cysteine
CN Lisil
CN Lisomucil
CN LJ 206
CN Loviscol
CN Muciclar
CN Mucocis
CN Mucodyne
CN Mucofan
CN Mucolase
CN Mucolase
CN Mucolase
CN Mucolase
CN Mucopront
CN Mucotab
CN Mukinyl
CN Pectox
CN Pulmoclaste
CN Reomucil
CN Rhinathiol
CN Rhinathiol
CN Rinathiol
CN S-(Carboxymethyl)-(R)-cysteine

CN S-(Carboxymethyl)-L-cysteine
CN S-Carboxymethyl-L-cysteine
CN Siroxyl
CN Thiodril
CN Transbronchin
AR 2387-59-9
FS STEREOSEARCH
DR 11139-64-3
MF C5 H9 N O4 S
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN,
CSCHEM, CSNB, DDFU, DRUGU, EMBASE, HODOC*, IFICDB, IFIPAT, IFIUDB,
MRCK*, NIOSHTIC, PHAR, PHARMASEARCH, PROMT, RTECS*, TOXCENTER, ULIDAT,
USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

551 REFERENCES IN FILE CA (1947 TO DATE)
23 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
551 REFERENCES IN FILE CAPLUS (1947 TO DATE)
13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

FILE 'HOME' ENTERED AT 12:45:10 ON 31 JUL 2003